

THE AMERICAN JOURNAL of OCCUPATIONAL THERAPY

OFFICIAL PUBLICATION OF THE AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

Vol. XIV, 6

1960

November-December



TABLE of CONTENTS

ARTICLES

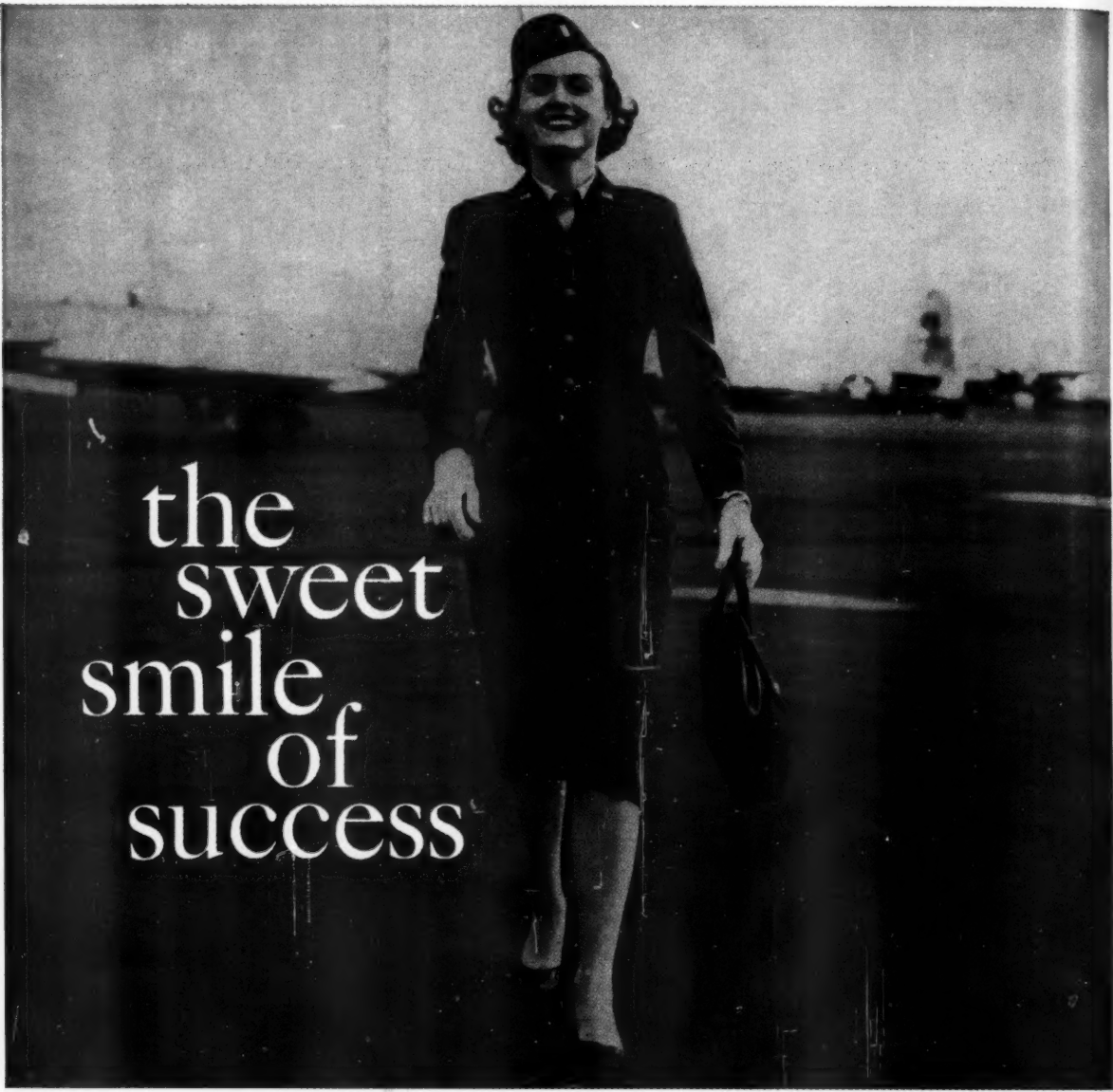
- Professionalization and Occupational Therapy..... 285 •
Robert Sommer, Ph.D.
- The Use of Self in Occupational Therapy..... 288 •
Ruth A. Robinson, O.T.R.
Jason A. Aronson, M.D.
Steven Polgar, Ph.D.
- A Physiological Approach to the Regulation of Activity in
the Cardiac Convalescent 292 •
Donna Hendrickson, O.T.R.
Janet Anderson, O.T.R.
Edward E. Gordon, M.D.
- Retardates in a Work Adjustment Program 297 •
Donna Patrick, O.T.R.
- A Self-care Program for the Child with Progressive
Muscular Dystrophy 301 •
Ann G. Morris, O.T.R.
Paul J. Vignos, Jr., M.D.
- Fingerpainting for the Hostile Child 306 •
Lela A. Llorens, O.T.R.
Gregory G. Young, M.D.

DIVISIONS

- | | |
|-------------------------------|------------------------------|
| Nationally Speaking 309 | Delegates Division 313 |
| Queries and Answers 311 | Classified Ads 315 |

FEATURES

- | | |
|---------------------------------|-------------------------|
| Picture Page 308 | Book Reviews 315 |
| Letters to the Editor 312 | Have You Tried IX |



the
sweet
smile
of
success

If you are a graduate Occupational Therapist, you may be eligible for an Officer's Commission in the U. S. Air Force Medical Specialist Corps. You can build a career marked by good pay, steady advancement and solid security. In your trim Air Force uniform you will be admired and respected wherever you go...as a key specialist of the Aerospace Team.

Air Force leaders know that proper therapy can help restore good health and performance among those in our country's number one line of defense. If you are interested in a rewarding career of professional service as an Air Force Occupational Therapist, clip and mail this coupon.

U.S. Air Force

*There's a place for professional achievement
on the Aerospace Team*

Mail this coupon today

Air Force Medical Specialist Information
Dept. T0012, Box 7608, Washington 4, D. C.

I am a qualified Occupational Therapist. Please send me details on my opportunities as an Occupational Therapist in the Air Force.

Name _____ Phone Number _____

Street _____

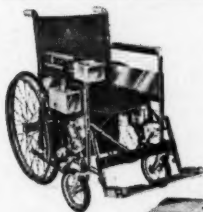
City _____ County _____ State _____

MISS PHOEBE

NO. 28 IN A SERIES



"Pilot to Phoebe... pilot to Phoebe... cut 'er down to 20 r.p.m.—the popcorn is going into orbit!"



Power Drive Chair
runs, turns, steers
with one-knob control

That "out-in-orbit" feeling comes naturally to patients in Everest & Jennings chairs. So simple to fold, so easy to carry in the car, so wonderfully maneuverable, these chairs almost say, "Go ahead—you can do it!" Made in sizes for all ages, models for all needs. You can recommend Everest & Jennings chairs with confidence.

There's a helpful authorized dealer near you

EVEREST & JENNINGS, INC., LOS ANGELES 25

The American Journal of Occupational Therapy

*The Official Publication of the
American Occupational Therapy Association*

Editorial Office: 3514 N. Oakland Ave.
Milwaukee 11, Wis.

EDITOR

Lucie Spence Murphy, O.T.R.

ASSOCIATE EDITORS

Marie Louise Franciscus, O.T.R., Lt. Col. Myra McDaniel, O.T.R.

EDITORIAL STAFF

ADVISORY COMMITTEE

PediatricsH. Kent Tenney, M.D.
University of Wisconsin Medical School
Physical MedicineBen L. Boynton, M.D.
Akron, Ohio
PsychiatryWalter E. Barton, M.D.
Boston State Hospital
TuberculosisA. L. Banyai, M.D.
Chicago, Illinois
EditorialWilliam R. Dunton, Jr., M.D.
Baltimore, Md.

DIVISION EDITORS

Genevieve Anderson, O.T.R. Norma Smith, O.T.R.
A. Jean Ayres, O.T.R. Florence Stattel, O.T.R.
Elizabeth Collins, O.T.R. Virginia Stockwell, O.T.R.
Eunice Ford, O.T.R. Mary Van Gorden, O.T.R.
Angeline Howard, O.T.R. Beatrice Wade, O.T.R.
Eleanor Kille, O.T.R. Carlotta Welles, O.T.R.
Barbara Locher, O.T.R. Wilma West, O.T.R.
Henrietta McNary, O.T.R. Minnie Witham, O.T.R.
Josephine Moore, O.T.R. Elizabeth Withers, O.T.R.
Martha Norris, O.T.R.
Bertha Piper, O.T.R.

CONTRIBUTING EDITORS

Naida Ackley, O.T.R.
Robert Belyea, O.T.R.
Lottie Blanton, Capt., AMSC
Virginia Caskey, O.T.R.
Marianne Catterton, O.T.R.

Marion Crampton, O.T.R.
Marjorie Fish, O.T.R.
Winifred Kahmann, O.T.R.
Virginia Kilburn, O.T.R.
Cornelius Kooiman, O.T.R.

Elizabeth Messick, O.T.R.
Ruth Robinson, Col., AMSC
Frances L. Shuff, O.T.R.
Julie Shaperman, O.T.R.

AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

250 West 57th Street, New York 19, N.Y.

OFFICERS: *President:* *Helen Willard, O.T.R., ('61); *First Vice-President:* *Beatrice D. Wade, O.T.R., ('61); *Second Vice-President:* *Lt. Col. Myra McDaniel, O.T.R., ('62); *Treasurer:* *Wilma West, O.T.R., ('60); **BOARD OF MANAGEMENT:** *Delegates:* *Ethel Huebner, O.T.R., ('60); Dwyer Dundon, O.T.R., ('60); Donna Harper, O.T.R., ('61); Eileen O'Hearn, O.T.R., ('61); Irene Robertson, O.T.R., ('60); Mary Van Gorden, O.T.R., ('61). *Elected members:* Marguerite Abbott, O.T.R., ('60); Genevieve Anderson, O.T.R., ('62); Shirley Bowing, O.T.R., ('62); Mary Britton, O.T.R., ('61); *Ruth Brunyate, O.T.R., ('60); Gail S. Fidler, O.T.R., ('60); Satoru Izutsu, O.T.R., ('61); Barbara Jewett, O.T.R., ('62); Maj. Elizabeth Nachod, O.T.R., ('60); Martha Matthews, O.T.R., ('61); Elizabeth Messick, O.T.R., ('62); Mary Reilly, O.T.R., ('62); June Sokolov, O.T.R., ('61); *Honorary member:* William R. Dunton, Jr., M.D.

*Members of the executive committee.

EXECUTIVE DIRECTOR: Marjorie Fish, O.T.R., 250 West 57th Street, New York 19, N. Y.

Correspondence relating to editorial matters should be sent to *The American Journal of Occupational Therapy*, 3514 N. Oakland Ave., Milwaukee 11, Wis. Only original contributions should be submitted for publication in the Journal and if accepted, may not be published elsewhere without permission.

Opinions and statements expressed in the magazine are those of the authors of articles and are not to be considered as representing the views of the American Occupational Therapy Association.

Manuscripts should be typewritten, double spaced, with liberal margins and submitted in duplicate. References should be listed at the end of the article and not as footnotes.

Illustrations may be included. Photographs should be glossy prints 3" x 5" or larger. Drawings must be drawn and lettered in India ink on heavy paper.

Correspondence relating to subscriptions should be sent to the American Occupational Therapy Association, 250 West 57th Street, New York 19, N. Y. Change of address notices should include the old as well as the new address, postal zone, and should be mailed six weeks in advance of publication date.

The Journal is published bimonthly on the 10th of February, April, June, August, October and December.

Subscription price to members included in yearly fees; to non-members \$6.00 a year domestic, \$6.50 foreign. Single issues, \$1.25.

Correspondence relating to advertising should be sent to the editorial office. Classified advertising accepted only for job opportunities or positions wanted.

Second class postage paid at Milwaukee, Wisconsin

HELP SCIENCE FIGHT TB

ANSWER YOUR
CHRISTMAS
SEAL LETTER
TODAY!



A Preview of Professional Opportunities in the AMSC



OCCUPATIONAL THERAPISTS IN THE ARMY MEDICAL SPECIALIST CORPS. Major Maryelle Dodds, Captain Janet Werner, and 2nd Lt. Judith Ouradnik, left to right. Their careers reveal the range of opportunities in the AMSC for selected college graduates. Photographed at Walter Reed General Army Hospital, Washington, D.C.

Major Maryelle Dodds' career ranges from the 98th General Hospital, Neubrucke, Germany, to the University of Southern California, where she received her master's degree. She has been an instructor at the Army Medical Service School, and a civilian instructor at Ohio State University.

Major Dodds is currently Chief Occupational Therapist at Walter Reed General Hospital. Here, she coordinates all occupational therapy activities, assigning and supervising her staff to provide professional treatment for all age groups, both male and female.

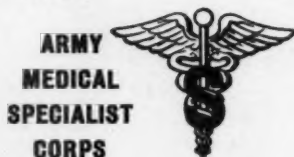
In a varied career as an Army occupational therapist, Janet Werner ranks her present assignment among the most challenging. Currently, she's supervising the O.T. Clinical Affiliation at Walter Reed General Hospital, one of the four hospitals where the program is conducted.

Captain Werner guides newly commissioned officers through an intensive professional program. It includes supervised treatment of patients, ward rounds, field trips, observation of surgical procedures, lectures, conferences, and staff meetings. The program begins in March and August of each year.

After graduating in June 1959 from Mount Mary College in Wisconsin, Judith Ouradnik entered the Army's O.T. Clinical Affiliation Program. She was commissioned a 2nd Lt. for a period of 24 months, and began her affiliation at Brooke General Hospital, San Antonio, Texas, completing it at Fitzsimons General Hospital, Denver, Colorado.

Judith's 39-week program included the following: clinical application of O.T. in the treatment of physical disabilities, 3 months; neuropsychiatric disorders, 3 months; general medical and surgical conditions, 3 months.

ANNOUNCING......openings in the O.T. Clinical Affiliation Program beginning March and August, 1961. You are invited to mail the coupon today for more information about this approved program in the Army Medical Specialist Corps.



OFFICE OF THE SURGEON GENERAL
Department of the Army
Washington 25, D.C.

JOT-12-60

Please send complete details on the AMSC Clinical Affiliation Program in Occupational Therapy.

NAME _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____
SCHOOL _____
DATE OF GRADUATION _____

THE AMERICAN JOURNAL of OCCUPATIONAL THERAPY

Official Publication of the American Occupational Therapy Association

November-December

1960

Vol. XIV, No. 6

PROFESSIONALIZATION AND OCCUPATIONAL THERAPY

ROBERT SOMMER, Ph.D.*

One of the factors that will influence the development of occupational therapy on this continent is the increase of professionalization in all fields. Training is becoming more standardized, credentials more formal, and admission requirements to professional societies more stringent. Furthermore, the role of the university in professional education is becoming more crucial. A knowledge of these factors will enable the occupational therapist to gain perspective toward changes in his own field. Although not all of the developments that can be expected in the next decades will necessarily be beneficial to occupational therapy or society at large, the consequences of living in a society with a rapidly increasing technology, higher standards of education, and specialization of function, cannot be overlooked.

It may be relevant to mention briefly the history of medicine in the United States. Initially most medical schools were privately owned. The number of medical schools reached its peak in 1904, when there were 160 in existence.¹ With few exceptions, state universities did little with medical education until the beginning of the twentieth century. In the early years of the twentieth century, only a handful of medical schools offered an educational program that could be considered adequate by present-day standards. Of the remainder, many were proprietary institutions operated for the profit of their promoters or faculties. Others were outright diploma mills. Standards for admission were practically non-existent. This same situation was also true for many other fields including dentistry. Gradually, however, medical schools have increased the requirements for entering students. Another trend has been the affiliation of the independent medical schools with the universities. We see these two parallel trends: the increase in

requirements before admission to professional schools, and the taking over of the professional schools by universities. Evidence of these same trends can also be found in the field of occupational therapy. On this continent, schools of occupational therapy were originally attached to private hospitals. The first courses were given both in hospitals and in art schools. By 1944, the last of these hospital schools in the United States ceased to exist as such and became part of accredited colleges.

Along with this rise in standards and requirements has been the development of satellite or ancillary professions, gradually taking over the functions vacated by the group moving on to higher status. As the nurse has become more of an administrator, the captain of a nursing team, so has the nurse's aide and practical nurse taken over much of the bedside nursing in the hospitals. There is a saying that nature abhors a vacuum and if a function in society is necessary, some people will be there to perform it. If social workers no longer want to do home visiting or compile welfare statistics, then some other people will be found to do it. These new groups will eventually attempt to restrict membership in their field and raise standards.

In many of the health professions we are witnessing divisions of labor according to the training of the individual. For example, social workers in England, in the recent Younghusband report, recommend a senior interviewer who handles casework with people who have serious emotional problems, an intermediate caseworker, and finally a visitor.² This development has parallels in other professions. In occupational therapy the

*Research social psychologist, Saskatchewan Hospital, Weyburn, Sask., Canada. A draft of the paper was presented at a meeting of the Saskatchewan Society of Occupational Therapists.

idea of an occupational therapy assistant with recognized status is a contentious issue. I won't discuss this at length, but I do want to point out similarities between what is happening in occupational therapy and in the other health professions. For example, many psychologists maintain that the Ph. D. is the basic professional degree. However, we find that people who do all the work necessary to obtain a Ph. D. don't want to do any routine testing, especially testing of intelligence quotient. Many psychologists see the need for a new group of people, psychometricians, who will handle routine testing and nothing else. If this development ever materializes, we can expect this group of people to pressure for some form of professional recognition and protection.

Some other trends common to all the health professions can be mentioned here only briefly. One of the most important is the trend toward greater specialization in all fields. Soon nursing will be split in five or six ways, medicine has already seen the advent and flowering of the specialist. Even in the basic sciences, we are seeing various types of physicists, chemists and engineers who don't know how to speak to each other. However there is a parallel development that on the surface seems the converse of the trend toward specialization. This is the emergence of the specially-trained generalist.

Medicine is witnessing both trends; an increase in the number of specialists, and an attempt to professionalize and increase the status of the general practitioner. There are many workshops and post-graduate institutes in general practice being conducted. In England there is an attempt being made to establish a fellowship and advanced society of general practice. Then there is the matter of subsidized training and bursaries available to students who want to go into service fields.

The tremendous need for people in the various health professions has underscored the long training and the few tangible rewards. Even the past decade has seen a tremendous increase in the number of training bursaries and public grants available. Then there is the increasing number of post-graduate courses. Because the health professions are changing so rapidly, even people trained five or ten years ago need to keep posted on new developments. In all the professions, and especially in the health fields, we find a proliferation of postgraduate and advanced courses for those holding the traditional diplomas or degrees. With an increase in professionalization, there usually comes an emphasis on better teaching, on securing the most competent people for the training schools. Once this has been taken care of, there arises the need for research within the field. Another inevitable consequence of professionaliza-

tion is the development of a strong national organization with frequent conflicts between regional and national groups. This occurs in almost all of the professions, and is unavoidable when distances are great and communication is poor.

Every profession needs its own working concepts. These are ideas that add new knowledge or tie together previously isolated facts. Some concepts are merely new names for old phenomena. This sort of concept isn't too helpful. A term that doesn't add new knowledge or bring together isolated facts is like a toothpaste with GL 70 instead of VL 69. Many service professions lack a body of concepts that can be applied to their data or guide them in the collection of data. They operate blindly and expediently. Textbooks in these fields are filled with demonstrations and there is a dearth of fundamental principles. Some health fields borrow their basic concepts from medicine and psychiatry. This seems the worst kind of borrowing since they are using another applied field.

It should be realized that having a set of concepts of one's own does not isolate a profession from other groups. A good concept, usable to members of one profession, is hardly ever rejected by members of other professions. I would like to see developed a body of theory for occupational therapy that would be useful not only in teaching students, but in evaluating the effectiveness of certain techniques. When there is no coherent body of theory, then there is no possibility of evaluating which techniques work and which don't. Working concepts are necessary for the development of suitable instruments for evaluating techniques or practices. One occupational therapist in this hospital has found that typing is a therapeutic activity. This is fine as far as it goes, but it's important to learn why it is therapeutic. A better understanding of the "why" can reveal what other techniques will be equally or more therapeutic. Also it permits the therapist to economize in his work. Perhaps it isn't that *all* aspects of the typing are therapeutic, but only the fact that the patient is doing a sensible adult task. If this is the only reason why typing is therapeutic, the occupational therapist will be able to find less expensive and time-consuming tasks for his patients. Many occupational therapists prefer doing to writing, but the latter is vital and necessary for professional status. No profession can rely indefinitely on members of other professions for concepts and a theoretical foundation.

This is the picture I see of occupational therapy in the next decades based on the experience of the other health fields. For every pressure there is a contrary pressure and from these will emerge

a synthesis embodying some of the characteristics of both processes.

I see a large national society getting larger, with increasing contact between the executives of different national societies, and attempts to evaluate and standardize the training of therapists throughout the world. On the other hand there will be more barriers erected by national and state societies against people trained in other places. These barriers will take the form of state certification for therapists and recognition of state societies as legal or corporate entities. There will be internal pressure from the various specialties for separate meetings, journals and training. This will be vigorously opposed by persons both in and out of occupational therapy who will insist on the need for treating the entire person. This latter group will press for the study of a greater range of courses (e. g., anthropology, sociology, statistics, etc.). The result of this may be a general basic training covering a wide range of subjects not directly connected with occupational therapy followed by a year or two of intensive training in one of the specialties. Those therapists who head large departments will be able to enroll in special university courses in administration, teaching, and supervision. These classes will be taught under a new university department of administration much broader in scope than the present schools of business. It will cater to such diverse groups as senior nurses, civil servants, school principals, and health society directors.

There will be moves to affiliate with related societies such as recreation and music therapy. On the other hand, as these other specialties develop and are subjected to many of the pressures we have discussed, there will be frequent inter-professional conflict. The therapist who has been using art, music or dance in his work, will find himself faced with specialists who are specifically trained in these media. While gaining in status and numbers, therapists will feel that they are losing valuable parts of their therapeutic armamentarium to new groups of specialists.

The therapist will also lose traditional occupational therapy functions to lesser trained individuals in many job settings, especially those that are unattractive from the standpoint of salary and working conditions. These functions will be performed by people who rise from the ranks of nurses' aides, attendants and maintenance staff. These people will be the most industrious of the unskilled employees and will be highly motivated to succeed in their new positions. If they are not permitted to join the occupational therapy societies and acquire professional status, they will form their own society and establish a separate training program.

Research will become an integral part of the occupational therapists job. Techniques that have been accepted as useful will be evaluated and some found wanting. If the experience of other health fields is any guide, these objective evaluations will not influence therapists who already use the techniques, but will influence students in training and future generations of therapists. As some therapists acquire competence in experimentation and statistics, others will express the fear that the field is moving away from the patient. Since a high percentage of the research oriented therapists will gravitate to university and editorial positions, there will be complaints by practitioners that the traditional ingredients of the therapists' role are being neglected in favor of non-clinical skills.

In Switzerland an association of professions was recently formed to discuss problems of mutual interest.³ It includes such diverse groups as the Swiss Federation of Lawyers, the Swiss Society of Pharmacy, the Swiss Society of Engineers and Architects, the Swiss Society of Veterinarians, the Swiss Medical Association, the Swiss Society of Dentistry, and the membership is presently being enlarged. They found that members of one profession were, in their words, "ignorant of the activities of others." For example, the veterinarians pointed out that they were not, as many persons imagined, simply doctors to sick animals, but rather economists with a knowledge of medicine. They found considerable common ground for discussion, ranging from the ethical implications of one's work to recruitment for the professions. The engineers and architects noted that their association had reached the stage where they not only looked at the qualifications of respective members but also at their standards of behaviors. Several of the groups felt the need to add to their already long curriculum, but did not know how to do this. Others remarked that certain areas of their work were being encroached upon by other less qualified persons. It is apparent that many of these problems are similar to those we have already discussed. It is an intriguing question whether a council of health professions can arrive at more effective and far-reaching solutions than each of the professions working separately.

REFERENCES

1. *Education for the Professions*. (Lloyd E. Blauch, editor). Washington: Government Printing Office, 1955.
2. "Report of the Working Party of Social Workers in the Local Authority Health and Welfare Services." H. M. S. O., 1959.
3. "An Association of Liberal Professions." *Canadian Medical Association Journal*, February 13, 1960. Page 379.

THE USE OF SELF IN OCCUPATIONAL THERAPY

An On-The-Job Training Program

RUTH A. ROBINSON, O.T.R.*

JASON A. ARONSON, M.D.†

STEVEN POLGAR, Ph.D.‡

This decade has been one of continuing evaluation for occupational therapy as it has been for all disciplines in the field of medicine. Changed concepts of rehabilitation and the impact of chemo-therapy on the treatment of tuberculous and neuropsychiatric patients have necessitated a redetermination of the role and function of the occupational therapist with an anticipation that the result may demand a change in the education pattern to meet the changing patterns in clinical practice. Concurrently, it has become evident that the opportunities in day-to-day clinical experience are not adequate to upgrade all therapeutic skills to the desired degree.

Thus it becomes increasingly necessary for occupational therapists to take specific steps to enhance their knowledge. Only a small percentage can be expected to attend specialized courses. On-the-job training programs, therefore, must be undertaken to insure a level of performance at least equal to the changing demands of practice. The responsibility for instituting such programs rests with the supervisor: one of his main functions is to afford those he supervises a continuing opportunity for professional growth.

With this as our premise, we will discuss a long-term on-the-job training project undertaken by an occupational therapy staff at an Army general hospital in the interest of improved patient care. The purpose of the project was twofold: The first to investigate the kinds of knowledge most useful to the occupational therapist in his relationship with patients; the second, how best to help the occupational therapist become more aware of and better able to use this knowledge.

The occupational therapy staff was diversified in interest, experience and assignment. During the period covered in this report their number varied from 9 to 13. Their responsibilities covered the treatment of all the diagnostic entities found in the large general hospital plus special programs for amputees, spinal cord and brain damaged patients, for pediatric patients and for psychiatric patients. Treatment was administered on the wards and in two clinics, one for psychia-

tric patients and one for other ambulant patients. It was not unusual for some staff members to meet only at planned conferences.

Given this diversity of responsibility and interest and with the profession's increasing awareness of the importance of self in occupational therapy, the choice of a subject for group study was obvious to the supervisor. Her interest, too, had been increased by Dr. Jerome Frank's paper, "The Therapeutic Use of Self," and the subsequent discussion¹ at the occupational therapy institute-conference held in Cleveland, Ohio, in October, 1957. With the eager support of one of the staff who had also attended the conference, she determined that the time had arrived to institute a discussion group on the subject.

The members of the staff were requested to read Dr. Frank's paper prior to the first discussion. The paper, a fine contribution to occupational therapy literature, is clear, comprehensive and pertinent so this was readily done. It was obvious by the close of the second discussion period that interested and responsive as the group was, little or no progress could be made without skilled assistance in the one-hour weekly period allotted to the undertaking.

With the consent of the group, a psychiatrist (JA) was invited to act as leader. Several members of the group had attended the sessions he led for psychiatric aides assigned to a milieu therapy ward, and were familiar with his approach. His knowledge of occupational therapy

*Colonel Robinson, AMSC, chief, occupational therapy section, Walter Reed Army Hospital during major portion of project, currently chief, Army Medical Specialist Corps, Office of The Surgeon General, Department of the Army, Washington, D. C.

†Captain Aronson, MC, research psychiatrist, department of neuropsychiatry, Walter Reed Army Institute of Research, Walter Reed Army Medical Center, Washington, D. C., currently research associate, department of psychiatry, Harvard Medical School, Boston, Massachusetts.

‡Dr. Polgar, social science research assistant, department of neuropsychiatry, Walter Reed Institute of Research, Walter Reed Army Medical Center, Washington, D. C., currently lecturer in public health, University of California, Berkeley, California.

was limited; but this proved useful, however, since it permitted him to ask direct questions.

The psychiatrist was requested to give presentations to be followed by discussion. The group found the presentations helpful but discussion was minimal. This was attributed to a natural unwillingness to reveal interaction with patients until group relationships were better established. After two sessions, the group decided to try the case presentation method. The psychiatrist had pointed out that this was a common teaching method in medicine. In order that the group might become better acquainted and able to interact more frankly, he conducted a session in which each member was given an opportunity to share his background, his reasons for selecting occupational therapy as a career and the aspects of occupational therapy he found particularly interesting. The psychiatrist began by giving his own background and his reasons for choosing psychiatry as a career.

This led the group quite naturally into a planning discussion on case presentations and the method that could be followed. To permit the group to be prepared prior to the presentation, it was agreed that each member in turn would write and distribute a summary of a case of his choice. Preparing even a simple case summary is not an easy task when it is to be read perhaps critically by one's associates. At first there was some hesitancy in accepting this responsibility. After the first case discussion, however, this was no longer a problem.

A semantic problem arose when the psychiatrist, to the annoyance of the group, continually referred to the occupational therapist as the "OT worker." The members did not express this to him but did to the supervisor, who introduced it into the discussion. The leader pointed out that "therapist" had the connotation of "psychotherapist" to him, but from then on he said "occupational therapist."

The case presentations were helpful but at the same time somewhat limiting to free general discussion. Inevitably, only the most difficult cases were selected. The diagnoses ran the gamut from quadriplegia and paraplegia, hemiplegia, cerebral palsy, through congenital anomalies, ulcerative colitis, senility, involved orthopedic and peripheral nerve injuries to regressed psychotics, hypochondriacs and paranoid schizophrenics. Each case was more complicated and problem laden than the one before. As time went on and vacations cut into the staff, less and less time could be spent on preparation. Finally, the cases were presented orally without written summary. This made a more spontaneous presentation but further inhibited group discussion.

During the fourth month the anthropologist

(SP) was invited to join the seminars as an observer. Prior to and after the period of observation, all participants were given an opinion questionnaire to fill out. To systematize the analysis of what went on, a modified version of Bales' scheme of interaction analysis² was used. This system comprised 12 categories for coding interactions in a group. Six fall within the "task area": questions and answers to the problem of communication, evaluation and control; and six in the "social-emotional area": positive and negative interactions related to decision making, tension reduction and reintegration.

It was expected that during these four months there would be an increased understanding by the occupational therapists of psychic factors in patients and in themselves. The protocols taken during the meetings could reflect this by increased interaction in the evaluation area; the formulation of these evaluations in more abstract and "dynamic" terms and increased self-reference by the occupational therapists. It was also expected that changes would occur in the way the group functioned. This could be demonstrated by more general participation plus greater freedom to interact in the "social-emotional area" with increased joking as well as increased manifestations of tension and approval, and finally, that the discussion would become more general and therefore less focused on the psychiatrist.

None of the first three expectations were fulfilled. The observer felt that during these four months the occupational therapists still expected the psychiatrist to make most of the evaluations. This was during the period when the case presentation method was still being used and much effort was expended on the task of reporting all the relevant information. When the psychiatrist asked for an evaluation, the occupational therapist often responded by bringing out more facts on the patient's behavior. They could and did talk about "dynamic" factors, but seemed reluctant to do so much of the time. Other studies in this area^{3,4,5,6} seem to indicate that among psychiatrists, psychiatric nurses and attendants the emphasis on specificity is correlated with better therapists and with times of smooth operation.

All three of the expectations in the area of group functioning, on the other hand, were fulfilled to some extent. There was slightly more participation by the occupational therapists. Discussion became less focused on the psychiatrist. The presenter obviously gained insight from the opportunity but unless the others also "knew" the patient, they remained observers. Freedom to interact in the "social-emotional" area increased quite markedly over the period but not in a continuous manner.

At a meeting toward the end of the four-

month observation period, it was agreed by the group that the seating arrangement could be improved. At the next meeting the tables were pulled together into a large square. The results were as would be anticipated. With the psychiatrist no longer seated at the "head" of the table and the visual field of each participant broadened to include all other participants, the focus of conversation was further shifted away from the leader. This constituted an important, group-determined step toward greater self-sufficiency.

It was at the next week's meeting that the anthropologist reported on his observation of the group. The results of the opinion questionnaire were in accord with some of the observational findings. The questionnaire was composed of 40 items with each of which the respondent could strongly agree, agree, somewhat agree, somewhat disagree, disagree, or strongly disagree. The first of the four categories (which were randomly mixed in the questionnaire) was concerned with attitudes toward psychiatric illness in general. The opinions expressed at both times the schedule was administered were very close to the "interpersonal" (as against "administrative") attitude. Hence, the questionnaire showed minimal change during this period. The second and third categories were centered around the problem of how to approach and respond to patients. Changes in this area involved a greater willingness to talk about sexual matters, much more ready acceptance of anger in patients, and a less easygoing attitude toward non-cooperating and demanding patients.

It was the last category that provided the surprise. This group of questions was related to attitudes toward the relative importance of occupational therapists as members of the medical team. These attitudes, instead of showing an expected increase in feelings of importance as a result of the meetings, showed a drop. Most significantly, this drop was greatest in the four questions which were concerned with a doctor-occupational therapist relationship. While all the occupational therapists considered themselves as important members of the team at both times, the only items where a more positive response was given the second time were those in which no other profession was mentioned. In discussing this result, it was felt that the close contact between the occupational therapists and the leader of the discussions, who was a physician, made all concerned more aware of what the problems were. Some of the feelings of hostility toward other professions, resulting in a defensively high evaluation of the contribution of occupational therapy, declined during these months. That they were by no means completely extinguished became apparent during the role playing session where negative feelings were expressed toward physicians who

were depicted as "so busy" and as having little understanding of occupational therapy.

The report on the group processes produced the most discussion. Rather than coming as a revelation it confirmed the feeling that had already resulted in the changed seating arrangement. It also served to focus the question, "where do we go from here?" Role playing was discussed as was the value of tape recordings of patient-therapist interaction. The group looked on both methods with some disfavor since both required greater participation and self-revelation on the part of every member. They seemed to be apprehensive almost to the point of not wishing to continue, much as they felt they had gained from the experience. If a secret ballot had been cast then, the nays probably would have won the day.

Feelings were openly expressed in the following meetings but no decision was reached. A tape recorder was finally brought in. The discussion that ensued was recorded and played back at the end of the session. The group decided to role-play at the next meeting. At that time this method seemed far better than recording actual patient-therapist situations.

The role playing session was a source of relief and amusement and honest admiration of their fellows for those fortunate enough not to be chosen to participate. The session served its purpose. It was finally decided that the only way to get the "raw material" necessary for discussion was to record actual situations.

By this time the participants felt far more comfortable in the group. Perhaps because of this, tape recordings of therapist interaction with patients were found to be less of a threat than had been anticipated. These recordings provided material that otherwise would have escaped attention. Such subtleties as a sigh implying a judgment when a patient reported activities not normally approved and apologetic behavior arising from the therapist's feelings of inadequacy are not brought up in group meetings. The group not only has an inhibitory effect but also the occupational therapist is often not aware of this behavior. Tape recordings of therapist-patient interaction was the most useful approach to therapeutic use of the self.

In surveying this experience, we have noted that resistance was encountered in getting the group to participate actively in a situation which could eventually lead to an appreciation and understanding of the use of self in occupational therapy. One of the factors contributing to this reluctance seemed to be the courage needed to reveal what might be considered inadequacies. Others seemed to be the diversification in age,

experience and status position within the group, the group's shifting membership and the fact that the one-hour meetings were held only once a week during the last hour of the day.

At the natural end of the experience, the group decided to determine what it felt had been accomplished and what it thought the use of self in occupational therapy is. To accomplish this, each participant recorded what the use of self now meant to him. The information thus obtained was then pooled and discussed.

Therapeutic use of the self, this group decided, refers to the relationship between the occupational therapist and the patient. This relationship is similar to that between a doctor or a nurse and a patient, except that the therapist does not act upon the patient's body by giving injections or prescribing medication. It more closely resembles the relationship established between a psychiatrist or a social worker and a patient. However, the occupational therapist has at his disposal more than verbal interaction. He participates with the patient in an activity, usually with the overt goal of producing an object. This is a great advantage with withdrawn patients or those coming from cultures more oriented to "doing" than to "talking." The occupational therapist can use the project as a common ground between the patient and himself and in this way is not dependent on verbal interaction alone. But whether participating with the patient in "doing" or in "talking," a relationship is established. Therapeutic use of the self in occupational therapy is the use of this relationship in understanding and modifying the patient's behavior.

Each relationship between a specific occupational therapist and a particular patient is unique. So many factors enter in that no two relationships are ever the same. There are many patient variables: How old is the patient? Which sex? How strongly motivated? Why is the patient in the hospital? What is his socio-cultural background? Has he handled his illness by denial, over-compensation or depression? Is he dependent, immature or hostile?

There are variables for the occupational therapist as well: Is he perceptive, aware of his own feelings and attitudes, or critical and rigid? Is he domineering, anxious, passive, sympathetic or detached? How much tolerance has he for the patient's expressions of hostility, teasing or awkwardness? Has he a sense of humor? Is he frank?

Other factors also affect the situation. Does the relationship take place on a ward or in the occupational therapy clinic? Is the room noisy or quiet? Are there other patients around with whom the patient must compete for the therapist's

attention? What attitude had the referring physician conveyed to the patient about occupational therapy? How much information has been given to the therapist about the patient?

As time went on, the goals of the group became more explicit. These were that the occupational therapist should be more perceptive of what the patient is communicating both verbally and non-verbally and of his own feelings and attitudes and their effect on his relationship with the patient. This involves a greater awareness of the reasons behind both the patient's behavior and the therapist's responses.

The effect of such understanding can be illustrated by an example. Suppose a 65 year old male patient with hemiplegia is hostile and uncooperative in occupational therapy. Such a patient is difficult to work with, and an occupational therapist may respond hostilely or tend to avoid the patient by keeping busy at the many other demands on his time. The occupational therapist who understands the patient's behavior, seeing it as a symptom, the result of the patient's previous personality pattern and of his feelings about his disability, is making a first step toward therapeutic use of self. If, in addition, he recognizes his own annoyance as stemming from his resentful feelings toward an authoritarian father, he is likely to work more successfully with the patient than if he did not have this knowledge. He does not probe into the patient's background, or point out to the patient exactly what he is doing; but by recognizing what is going on the therapist is less likely to respond hostilely or to withdraw. As a result he is able to be more flexible and more supportive. This will greatly increase the probability of his getting the patient's acceptance of the occupational therapy for which he was referred.

Differences in methods of handling problems such as hostility will arise because of differences in the reasons behind a patient's behavior and in the way a specific patient will respond to a particular occupational therapist. There are no recipes for handling situations. Understanding the reasons behind behavior will suggest ways of meeting problems. The occupational therapist's awareness of how he, himself, is responding in the relationship increases his freedom to try different approaches.

What the occupational therapist does must be based on an understanding of what is going on. The therapist must constantly ask himself: "What does the patient mean?" and occasionally: "What am I doing?" A relationship always exists between the occupational therapist and the patient;

(Continued on Page 307)

A PHYSIOLOGICAL APPROACH TO THE REGULATION OF ACTIVITY IN THE CARDIAC CONVALESCENT *

DONNA HENDRICKSON, O.T.R.†

JANET ANDERSON, O.T.R.‡

EDWARD E. GORDON, M.D.§

Many descriptions have been published of physiological tests designed to match effort to the work tolerance of patients with diminished cardiac reserve. Very few of these have been useful in a clinical setting. In many instances therapists have relied on vague instructions and played it safe by underestimating the patient's capacity to undertake even ordinary activity. A need for a definite guide to work prescriptions has been felt by those working in the field.

A little known aid to this end is offered by an old concept with a new application, viz., the energy cost of effort. The concept affords us a practical, simple and rational, although approximate, method of selecting physical activity in accordance with the patient's tolerance. Its application rests upon known energy costs of various activities and the patient's clinical response to them. The energy costs of such ratings are now available in considerable numbers for many practical situations in industry, housework, recreation, occupational therapy and self-care.^{1, 2, 3} They have been determined by measuring oxygen uptake per minute during a chosen task, much as basal metabolic rate (BMR) is determined at rest. Many of the investigations have been carried out in the shop, factory and field. In this way, the validity of the measurements has been assured, as the subjects have been engaged with familiar tasks in accustomed surroundings. The "working metabolic rate" so obtained may be expressed in energy units. Suppose a person's BMR is 225 cc. (cubic centimeters) of oxygen per minute (min.) and walking on level ground at a speed of 2.5 miles per hour is found to require 800 cc. It is a simple matter to convert oxygen uptake to calories (Cal.): 200 cc. are equivalent to one calorie. In the example the BMR equals 1.1 Cal./min. and walking, four Cal./min. ($225 \div 200 = 1.1$; $800 \div 200 = 4$). Table I presents such values for several categories of physical effort.

For selection of activity, then, one can construct a scale of energy costs in ascending order bearing a simple numerical rating based on one (or near one) as the resting value (See Table 2 which is purposely abbreviated). It must be clearly understood that expenditure in Cal./min. expresses *rate*, i.e., the fuel consumption of the metabolic processes and the work output of the

physiological machinery in a minute's time. The unit does not refer to *duration* of effort or the total expenditure over some period of time. The individual's size and age will influence the working metabolism. Yet for practical clinical purposes, variations of this magnitude are not crucial. More important are the effects of emotional states, efficiency as determined by training, and pace of work. These may produce large deviations. In the practical application of working energy costs, these variables must be taken into consideration and appropriately controlled. For example, pace of work can readily be present. In the appended table (Table 1) of energy cost note several rates for walking. Efficiency of work is of no consequence, when familiar tasks are administered. Emotional stimuli represent the greatest possibility for error. In a test situation the patient must be free of anxiety, willing to submit to the manipulations by the therapists and above all accepting of the work situation prescribed, whether test or real.

Since effort must ultimately be supported by cardiac work, do energy cost values allow one to predict the degree of cardiac stress inherent in accomplishing a given task? The answer is in the affirmative.³ Provided energy expenditure is regarded as a rough index and the various influences mentioned above are anticipated, these data may serve as an approximate gauge of the ability of a cardiac patient to perform work.

Pertinent to the field of our interest, particularly in larger hospitals, the occupational therapist can assist in establishing work prescriptions on the basis of energy cost. It should be his job to assist in evaluation and upgrading of a disabled person's activity in terms of daily living, homemaking and gainful employment by utilizing the principles of work simplification and time saving, guided by energy costs of these activities. During the convalescent phase, physicians should refer the patient to the occupational therapist. His prescription should be specific and read something like this. "Establish level of activity that does not induce dyspnea, tachycardia, anginal

*From the department of physical medicine, Michael Reese Hospital and Medical Center, Chicago, Ill.

†Staff occupational therapist.

‡Supervisor of occupational therapy.

§Director, department of physical medicine.

TABLE I
Energy Costs of Activities
SELF-CARE ACTIVITIES

Activity	Cost, Cal./min.
Rest, supine	1.0
Sitting	1.2
Standing, relaxed	1.4
Eating	1.4
Conversation	1.4
Dressing, undressing	2.3
Washing hands, face	2.5
Bedside commode	3.6
Walking, 2.5 mph	3.6
Showering	4.2
Using bedpan	4.7
Walking downstairs	5.2
Walking, 3.75 mph	5.6
Propulsion, wheelchair	2.4
Ambulation, braces and crutches	8.0

HOUSEWORK TASKS

Activity	Cost, Cal./min.
Hand sewing	1.4
Sweeping floor	1.7
Machine sewing	1.8
Polishing furniture	2.4
Peeling potatoes	2.9
Scrubbing, standing	2.9
Washing small clothes	3.0
Kneading dough	3.3
Scrubbing floors	3.6
Cleaning windows	3.7
Making beds	3.9
Ironing, standing	1.7
Mopping	4.2
Wringing by hand	4.4
Hanging wash	4.5
Beating carpets	4.9

OCCUPATIONAL THERAPY ACTIVITIES

Activity	Cost, Cal./min.
Leather punching and lacing, reclining.....	1.2
Leather tooling, reclining	1.2
Making link belt, reclining	1.3
Rug hooking, sitting	1.3
Chip carving, reclining	1.5
Knitting (23 stitches/min.)	1.5
Weaving, table loom	1.5, 1.8
Copper tooling	1.6
Bookbinding, light	1.6, 1.9
Leather carving, sitting	1.8
Typing, rapidly	1.8
Weaving, floor loom	2.0
Chisel carving with mallet, standing	2.0
Chisel carving without mallet, standing	2.2
Power sanding or sawing	2.2
Sawing soft wood	6.3
Sawing hard wood	7.5

RECREATIONAL ACTIVITIES

Activity	Cost, Cal./min.
Painting, sitting	2.0
Playing cards	2.2
Playing piano	2.5
Driving car	2.8
Canoeing, 2.5mph	3.0
Horseback riding, slow	3.0
Volley ball	3.5
Bowling	4.4
Cycling 5.5mph	4.5

Golfing	5.0
Swimming, 20 yd/min.	5.0
Dancing	5.5
Gardening	5.6
Tennis	7.1
Trotting	8.0
Spading	8.6
Skiing	9.9
Squash	10.2
Cycling, 13 mph	11.0

INDUSTRIAL ACTIVITIES

Activity	Cost, Cal./min.
Watch repairing	1.6
Armature winding	2.2
Radio assembly	2.7
Sewing at machine	2.9
Cobbling	3.0
Bricklaying	4.0
Plastering	4.1
Tractor ploughing	4.2
Wheeling barrow 115 lbs; 2.5mph	5.0
Horse ploughing	5.9
Carpentry	6.8
Binding sheaves	7.3
Mowing lawn by hand	7.7
Felling tree	8.0
Shoveling	8.5
Ascending stairs 17 lb. load, 27 ft./min....	9.0
Planing	9.1
Tending furnace	10.2
Ascending stairs 22-lb. load, 54 ft./min....	16.2

pain, fatigue or cyanosis. The trial should start at X Cal./min. and advance progressively (see Table I.). Use tasks familiar to the patient. Punctuate work periods at first by brief rest every two to three minutes. Then increase duration of work as tolerated."

A cardiac program based on the above theory has been in operation for two years at Michael Reese Hospital and Medical Center within the occupational therapy section. We have seen a group of forty-two patients in which males and females were evenly distributed. There was a predominance of cardiac impairment on the basis of myocardial infarction and coronary insufficiency resulting from arteriosclerosis. Hypertensive cardiovascular disease and rheumatic heart disease were also seen. The average total duration of hospitalization was five weeks; while the average length of treatment by occupational therapy was two and one-half weeks. The following discussion will include a description of the process of evaluation and upgrading of work capacity along with the formulation of a proper work prescription.

EVALUATION

Evaluation of rehabilitation potential requires a knowledge of the cardiac patient's psychological status, the medical background, social background and capacity for activity.

Psychological factors play an important role because emotional disturbances tend to raise or lower the energy expenditure above or below that required for a given task. Rejection of the media used, unresolved attitudes toward illness,

tension, anxiety over personal problems and poor work habits may all cause such deviations. Many patients harbor fears of dying, of becoming an invalid for life, of losing their characteristic role and of being forced to retrench their economic status. We have noted that a therapist can reinforce the above factors by attitudes of defeatism and lack of positive direction. First, it is essential that a working relationship be established. A therapist who is calm, normally sympathetic and a willing listener can gain much information that will help him in establishing a safe level of activity. Second, positive reassurance, by pointing out what the patient can do instead of what he cannot do and that he is doing as others have done before him, is an excellent stepping stone to good rapport.

Thorough interpretation of the medical data should be sought from the physician. Pertinent guide-lines so obtained embrace the ECG (electrocardiogram) findings, in terms of healing, the present pulse rate, the duration of illness, the prognosis for recovery, the current medication, the amount of activity presently allowed and the patient's adjustment to his illness. Moreover, social service workers can often help with information about the family in planning for the future.

Early emphasis on innate recuperative powers sets the stage for positive attitudes and accomplishments. Energy levels guide us to realistic, progressive activity goals and allow us safety to implement such emphasis. In the first interview, we explain the process of establishing and upgrading energy levels. We inform the physician of these levels and work under his guidance and approval. Questions are encouraged and the patient's cooperation is sought rather than ordered. For example, "Let's begin with walking at 2.5 miles per hour. If you can tolerate this, then you can probably make your bed, type, and prepare a simple meal." This approach can eliminate much tension and fear, because what one really says is, "The doctor, in cooperation with us, will accept the responsibility for what happens to you. We are reasonably certain you can do this—let's try it." The magnitude of the activity first selected, therefore, depends on the basis of the doctor's orders and the patient's status. We begin with one related to activities of daily living, (ADL), because the latter are basic to independent living, most flexible in terms of setting, least emotionally charged and easily interpreted by a doctor and patient in terms of progress. We go over the process of evaluation verbally and then have the patient perform. We also present Table No. I to the patient for his own education.

The actual process of evaluation of the patient against a chosen task can be compared to the process of weighing an unknown weight against a known one. Similarly, an activity of known energy cost, i. e., stress, is balanced against the patient's unknown ability to bear stress. The end point is read from the response of pulse rate to the exercise and the appearance or not of certain signals of distress such as precordial pain (angina), palpitation, shortness of breath (dyspnea), or fatigue. If pulse rate returns near the resting level in two minutes and if no danger signals develop during activity, then the patient's tolerance for stress exceeds that that inherent in the test activity, and one can choose a higher level of exertion.

The procedure for following pulse rate response is quite simple: (1) rest ten to fifteen minutes, then take resting pulse rate; (2) do activity, take exercise pulse rate immediately after; (3) rest two minutes and again take pulse rate. Count for fifteen seconds and multiply by four to obtain the rate for one minute. If after two minutes of rest it returns to within eight beats of the resting determination, one considers the activity safe. The above data is recorded in Table III. In addition to measurement of pulse rate the four symptoms, angina, palpitation, fatigue and dyspnea, are looked for. Tension, working habits and general attitudes toward the activity are also noted.

One difficulty must be noted regarding pulse rate. Since its rhythm is grossly irregular in auricular fibrillation, this measure cannot be used to gauge the cardiac response to exertion when the latter presents itself. Respiratory rate may then be used in the same manner; but it should be understood it is a much cruder index. Auricular fibrillation will occur frequently enough in the group of patients considered here; hence the importance of discussing the clinical aspects with the physician.

Assuming the patient can travel independently a few minutes in a wheelchair without undue symptoms, we can tell the physician he is at a level of about 2.4 Cal./min. and can probably dress and undress, go to the bathroom in a wheelchair and wash his hands and face. This is true providing the activity at this time is for short periods.

After the first day's evaluation of several ADL activities, we record the result and then go over the patient's daily schedule planning intermittent periods of rest and self-care. Adjustments in food and activity schedules inspire confidence in powers of recovery. Patients many times will take the initiative and plan their own schedules, letting the physician and therapist know when

TABLE II

Example of a Scale of Activities

Activity	Cost, Cal./min.
A. UP TO 1.8 CAL./MIN.	
1. Eating	1.4
2. Leatherwork	1.4
3. Sweeping	1.7
4. Ironing, standing	1.7
5. Machine sewing	1.8
6. Typing	1.8
B. UP TO 3.0 CAL./MIN.	
1. Floor loom	2.0
2. Playing cards	2.2
3. Power sanding or sawing	2.2
4. Wheelchair 1.2 mph	2.4
5. Washing and dressing	2.6
6. Peeling potatoes	2.9
10. Washing small clothes	3.0
C. UP TO 4.5 CAL./MIN.	
1. Hand sawing	3.4
2. Walking 2.5 mph	3.6
3. Cleaning windows	3.7
4. Making beds	3.9
5. Showering	4.2
D. UP TO 7.5 CAL./MIN.	
1. Walking downstairs	5.2
2. Cleaning floors, bending	6.0
3. Heavy hammering	6.3
4. Deep knee bends 16/min.	6.7
5. Push up 16/min.	7.5
E. WALKING UPSTAIRS, FAST	
	14.0

fatigue occurs. At this time an initial note is written, recording the energy level and the duration of activity as well as attitudes. For example: Initial contact on Oct. 1st. Patient is seen daily. He was given a series of activities which require hand, shoulder and slight elbow motion. He can function from fifteen minutes to one-half hour once a day without signs of physical stress or apprehension at a level of about 2.7 Cal./min with no significant increase in pulse rate. Activity will be gradually upgraded.

UPGRADING

The patient's activity is upgraded as fast as his condition warrants. We decide to move from one level to another according to the doctor's orders and total daily performance free of the signs of distress. Generally by the time a patient can walk downstairs (about 5.2 Cal./min.) he can function independently at home and is discharged.

An example of a note written during upgrading: "Patient continues to be seen once a day. His *intermittent* work tolerance is equivalent to a duration of one and one-half hours at an intensity of 4.2 Cal./min. without signs of physical stress and with no increase in pulse rate. He is a very alert, intelligent man who relates well to the therapist and surrounding environment. He exhibits initiative and creativeness in his activity. He can go back to intermittent work at approximately 4.0 Cal./min. The latter, however, will depend on additional factors

of environment, pressure and pace of work expected."

Many other interlocking techniques at the occupational therapists's disposal can also be utilized. Methods of time saving and home management are taught to women who must return to the role of housewife and mother. Many home-making activities have been measured in terms of energy expenditure and are listed in Table I. We have had some difficulty motivating women to change their habits. Reactions have varied from complete rejection, that may be associated with denial of illness, to acceptance. Some patients have shown passive aggressive tendencies. The latter patient would appear to learn what was presented, but there was no carry-over into the home. We have had more success when cooking and cleaning were put into a planned social setting, for example, making tea and cookies for a group of patients or cleaning up in preparation for a party.

With our male patients we primarily used ADL activities, woodworking and tasks related to their occupations because they were more readily accepted than other craft media. Most men were able to return to their former jobs with gradual upgrading at home after discharge. Many had desk jobs and could delegate work to others to lighten their load.

CASE HISTORY

A sixty-year-old male was admitted to Michael Reese Hospital complaining of chest pain of ten days duration. Nine years ago the patient had a "heart attack" with similar symptomatology, was admitted and remained for four weeks. The patient, on the second admission, was diagnosed as having myocardial infarction. After four weeks the patient was transferred to the convalescent unit where the therapist found him very receptive to cardiac evaluation. During the first session he engaged in a heated argument and his pulse increased beyond that of normal conversation. This represented the emotional effect on the cardiovascular system. He followed instructions willingly and complained of no physical symptoms in the tests. The next day, the patient walked for three minutes at a rate of 2.5 mph; resting pulse rate 80; exercise pulse rate 96; two-minute pulse rate 80. In the afternoon, he walked for five minutes at the same rate of speed with a pulse response of 84-96-84. The following day the patient walked downstairs (6 Cal./min.) for a period of two minutes: pulse rates were 92-100-88. In the afternoon he walked up and down a flight of eight three-inch stairs for four minutes with a response in pulse rate of 92-108-92. On subsequent days the pa-

TABLE III

Exercise Tolerance Test for Cardiacs

Friend Memorial Pavilion
MICHAEL REESE HOSPITAL AND MEDICAL CENTER

Department of Physical Medicine — Occupational Therapy

Name Dr.
Age Diagnosis Date
Admission date
Date Activity Cal./min. RPR EPR 2'PR Symptoms* Duration ECG

*Symptoms—dyspnea (D), angina (A), fatigue (F), palpitation (P)

RPR—resting pulse rate

EPR—exercise pulse rate

2'PR—pulse rate two minutes after cessation of exercise.

tient walked up and down a flight of four six-inch stairs for five minutes, at a rate of thirty vertical feet per minute. Pulse response was 72-104-76. This activity represented a high of 6.7 Cal./min. The entire period of testing showed a very satisfactory course of events. Our final tests showed that he could support an energy expenditure of approximately 7 Cal./min. for six minutes, his maximal work tolerance achieved. He was up and walking most of the day with no physical complaints and was able to perform all of the activities of daily living.

To summarize, this working record demonstrates the orderly progression of a patient through ascending levels of effort, from a work tolerance level of approximately 3.6 Cal./min. to a maximal level of approximately 7 Cal./min. At this level he was able to return to a useful and independent role in society.

Another useful application of an energy cost scale may lie in defining allowable activity according to pre-rated severity of heart disease. The current therapeutic cardiac classification (American Heart Association) expressed in terms of "ordinary activity," may be redefined on the basis of energy costs to serve as a better guide for proper selection of activity. Jones, quoted by Hellerstein et. al,² has determined that Class 1 cardiac patients can do up to 6.6 Cal./min.; Class 2 up to 4.0 Cal./min.; Class 3, 2.7 Cal./min. for intermittent activity.

In conclusion, thoughtful psychological evaluation and work tolerance testing, based on scales of energy cost, leads to progressive upgrading of physical capacity. They offer a means of more concretely communicating with and assisting the physician in both the management of cardiac patients and in planning their return to productive activity. We are convinced by the number of

referrals and the patients' response that this means of progressive reactivation is extremely effective.

BIBLIOGRAPHY

1. Passmore, R., and Durnin. "J.M.G.A.: Human Energy Expenditure." *Physio. Rev.* 35:801 (Oct.) 1955.
2. Hellerstein, H. K., and Ford, A. V. "Rehabilitation of the Cardiac Patient." *J.A.M.A.* 164:225 (May) 1957.
3. Gordon, E. E. P. "Energy Cost of Activities in Health and Disease." *Arch. Int. Med.* 101:702 (April) 1958.

NEW OFFICERS

New officers of the American Occupational Therapy Association elected for the coming year:
President-elect: Wilma West, O.T.R.

Board of Management members:

Re-elected

Gail Fidler, O.T.R.

Newly elected

Cornelius Kooiman, O.T.R.

Patricia Laurencelle, O.T.R.

Florence Cromwell, O.T.R.

Officers of House of Delegates

Speaker: Ethel Huebner, O.T.R.

Vice-Speaker: Marjorie Holtom, O.T.R.

Secretary: Margaret Smith, O.T.R.

Representatives to the Board of Management:

Laurence Peake, O.T.R.

Myrla Smith, O.T.R.

Elizabeth E. Holdeman, O.T.R.

Chairman of the Nominating Committee:

Arvilla Merrill, O.T.R.

Eleanor Clarke Slagle Lectureship for 1961:

Mary Reilly, O.T.R.

Award of Merit: Marion R. Spear, O.T.R.

A complete list of officers is listed on the masthead, Page II.

RETARDATES IN A WORK ADJUSTMENT PROGRAM

DONNA PATRICK, O.T.R.*

There are numerous facilities in existence today which are geared to the training and evaluation of the mentally retarded person. Their functions may range from pre-school habit training for the trainable child to work-exploration for the educable adult. Scheduling and training details can only be applied in context according to the specific goals, facilities and limitations of a given training milieu. Thus it is neither practical nor scrupulous to present a neatly packaged "formula" to be used universally by all clinics and services dealing with the mentally retarded. Individual programs emanate from the needs and aims adopted by the individual facility.

The occupational therapy department at the Hartford Rehabilitation Center provides a work-evaluation service for the educable mentally retarded. To be eligible for admission, the trainee must be between 18 and 35 years of age. His intelligence quotient must range between 50 and 75. If a trainee shows potential, as demonstrated by past performance, or if there is a need to delineate specific deficiencies, it is possible to deviate slightly from this standard. The three main functions of occupational therapy are work evaluation, work-habit training, and liaison with other services involved in the 9 to 12 month training program.

Work-habit evaluation and training are basic to our work adjustment program, for among the important characteristics any worker should possess are punctuality, reliability, perseverance, speed, accuracy, and a cooperative spirit. To encourage punctuality and satisfactory attendance, the retardate is required to use a time-clock of the type commonly seen in industry. In addition, the client's ability to tell time is evaluated by means of a cursory test presented in the occupational therapy department. Ability to use money is also evaluated. The client is then referred to a class conducted by volunteers for correction of specific deficiencies and training in practical usage.

The first activity presented to a patient is usually simple, concrete and repetitive; i.e., industrial bench work such as counting and packaging. Accuracy is stressed before speed, and the assignment is adapted to allow for early success.

Because of previous negative experiences, the retardate usually expects failure; this, in turn, affects his functioning. Most patients are profoundly lacking in confidence, which improves only after they have achieved success at a number of work skills, and after they have been given the opportunity to begin developing good interpersonal relationships. As self-assurance develops, a truer, and often improved picture of performance results. After the patient has become familiar with activity, speed is gradually emphasized. Most retarded individuals are afraid of the "testing" situation, and care must be exercised to avoid overwhelming the individual with a barrage of work-habit principles and time limits before he is ready to assimilate them. Most retardates have little or no employment background. As a result, "testing" usually involves an element of training which is modified by the individual's degree of retardation, adjustment problems, and lack of prior experience. Although the job samples presented represent only unskilled or semi-skilled occupations (see accompanying form), a great deal of repetition is necessary in order to determine the actual performance level.

Contrary to many opinions, retarded individuals are not all endowed with the ability to tolerate routine repetitive assignments. Therefore, sessions for a given task are gradually increased as the individual demonstrates the ability to concentrate for longer periods of time and indicates a greater immunity to distractions. Gradually, more complex abstract assignments are introduced, such as cleaning, cafeteria or stock-room duties. Supervision is lessened, and the client is instructed to follow work routines. He is gradually given more responsibilities which allow for the exercise of initiative, such as the assignment of a specific area to clean or stock-check. The retardate is exposed to group projects where he is given the opportunity to practice teamwork and to develop good working relationships. Frequently, the trainee participates with non-retarded individuals. The greatest hindrance to effective group participation appears to be the presence of emotional

*Occupational therapy department, Hartford Rehabilitation Center, Inc., Hartford, Conn.

rather than intellectual elements. Additional factors such as posture, general appearance, conformance to rules and courtesy are considered throughout the training period. Thus, the program employs the familiar principle of "graded activity" since activities are planned to progress from familiar to unfamiliar, from concrete to abstract, simple to complex, single to group and from supervised to independent performance.

The occupational therapy program may be visualized in three phases:

(1) *Introductory and warm-up period.* The new patient is encouraged to speak of his interests, former activities and understanding of the program. This is also a get-acquainted period where the groundwork for good rapport is begun. Program goals and requirements are presented to the client in simple terms.

(2) *Orientation and instruction in work habits and job areas.* Here the client is given instruction in the feasible semi-skilled and unskilled job samples, in addition to exposure to and training in basic work habits. This phase constitutes approximately 75 per cent of the occupational therapy evaluation period.

(3) *Summary and liaison phase.* After a five or six week period has transpired, the trainee's specific skills and limitations begin to emerge. In this final phase of the occupational therapy period, an appraisal is made of those areas and working conditions where the client shows the greatest motivation and potential. These activities are again presented to determine retention and compliance with employment standards. The retardate is oriented to what he may expect during the next several months as he progresses toward the later states of his training program.

There are certain environmental characteristics that cannot be captured in the occupational therapy workshop setting. For this reason, we find hospital, industry, and shop placement to be an invaluable aid in providing concrete and meaningful work experiences for the retardate. In the occupational therapy department, the trainee is exposed to job samples; he does not see his assignment as part of an integrated process; he cannot comprehend the relation and value of his work in terms of production. The reasons for emphasis upon speed, accuracy, and dependability are not clearly visualized. This may be exemplified in the reaction of one trainee after a visit to the hospital dishwashing area who remarked: "No wonder they have to go so fast; look at all the people eating out there!" Working with regular hospital employees provides a certain stimulus that is not found in the occupational therapy testing room. Interpersonal-relationships with new people, exposure to the rigors of longer working sessions, heat, dampness and noise are

elements that can be found only in an actual cafeteria, stock or central supply department. This we may compare to the occupational therapist's clinical training experience, where theory becomes dynamic only after being put to work.

Other advantages of hospital and shop placement are as follows:

1. The assessment of true skills in accordance with competitive production standards.
2. Encouragement for developing initiative and a sense of responsibility through positive identification with a working team.
3. Intensive trial periods which more accurately determine the trainee's interest, response, flexibility and tolerance to both the physical and emotional demands of a job.

A great deal is involved in determining the optimum caseload for a therapist. Extensive planning and liaison work may be necessary in addition to consideration of the many variables presented by both the retardate and his family life, past training and experience. Factors such as age, intellectual level, adjustment, degree of maturity and emotional make-up are of paramount importance in planning the work program. If a therapist's case load consists of a number of severely limited and/or emotionally disturbed patients, it may be necessary to direct teaching towards the individual rather than the group. On the other hand, if the case load consists of a number of individuals who appear to be fairly well-adjusted, and who operate at a similar level of ability, group activity may be indicated. Although group instruction entails less therapist supervision per patient, it requires a great deal of pre-planning which must also be taken into account in determining the optimum therapist-patient ratio. A factor in selecting the correct teaching method is the type of material to be presented. Simple, gross activities, such as laundry folding, are more easily presented to a group of individuals than stock-inventory work which is a more complex, abstract skill and requires a certain degree of judgment and attention to detail.

In the occupational therapy department at the Hartford Rehabilitation Center, no more than five retardates are seen by one therapist during a three-hour period. Each patient attends the program for a daily two-hour session. We find that, initially, the average retardate is severely limited in attention span and concentration. He is easily distracted by activity around him and requires close supervision and frequent "breaks." As a result, clients are not scheduled for periods exceeding two hours at the time a program is initiated. Following the occupational therapy evaluation, schedules are gradually increased, ideally to a full work-day. It usually requires several months of work-habit training before the individual is capable of working 6 to 7 hours per day. In this

type of program, the ideal patient-therapist ratio during the initial evaluation phase appears to be two patients per hour, and increases to four per hour after the retardate has become better adjusted to his environment and is able to participate more readily in group activity. This usually does not occur until at least one month has elapsed.

The occupational therapist continues to have contact with the trainee throughout the entire period. Often, after the initial 6-week evaluation, the therapist remains in close contact with the social service department which correlates and conducts individual and group counseling sessions, directs the volunteer program and maintains liaison with the patient's family, doctor and referring agency personnel. The occupational therapist also works with volunteers in interpreting specific information gathered during the retardate's evaluation in this department. Other functions include conducting group seminars dealing with principles of safety, use of time, budget-planning and the application of good work habits to a real work situation. The therapist continues to follow the performance and behaviour of the trainee after he has left the occupational therapy department and has been transferred to either or both of the Center's sheltered shops; i.e., wood-working and industrial. The shop setting provides an actual work situation with payment for effort on a piece-work basis, and simulation of a full work day. The therapist is responsible for placement of suitable trainees in hospital industries which are available in an adjacent building. His contacts with the vocational counselor produce valuable information relating to the nature of specific job areas and placement possibilities.

Progress reports are formulated through weekly contact with the supervisors of the laundry, cafeteria, stock-room or housekeeping departments. Monthly reports are presented at medical clinics, where the supervising medical consultant specifies goals and guides programs according to the information submitted by participating staff members.

The following brief outline summarizes the total program services in approximate order of sequence:

1. Pre-admission interview: Acceptance or refusal of applicant in accordance with program criteria (see accompanying form).
2. Occupational therapy evaluation.
3. Sheltered shop placement (approximately three months).
4. Training classes conducted by volunteers. These sessions are presented intermittently throughout program and spaced according to patient needs. The subject matter is concerned primarily with time, money and personal hygiene.

5. Hospital placement (if feasible, approximately 2 to 3 months). Occasionally, more than one placement is effected with a retardate if the client demonstrates more than one outstanding skill, or is unsuccessful in one placement and shows potential for another.

6. Group discussions regarding future employment, i.e., employer-employee relationships, job interviews, etc., conducted by vocational counselor and/or social worker in charge of program correlation.

If it is found that an individual appears to be unsuited for further work evaluation in a sheltered shop or hospital placement, he may remain in the occupational therapy department for further training in home activities. If he cannot become a productive member of society, it is possible, in many cases, that he may learn to be a more useful family member. Approximately 50 per cent of the retardates who have received services at the Hartford Rehabilitation Center have been successfully placed in outside employment; an additional 25 per cent can be employed in a sheltered setting. Of the remaining number, the majority have returned to their homes, having benefited from exposure to new experiences and people, guidance in deportment and daily habits and, most important, the opportunity to experience some small degree of success, perhaps for the first time.

**PRE-VOCATIONAL TESTING IN
SEMI-SKILLED AND UNSKILLED WORK AREAS
for**

Mentally Retarded, Brain Injured
(Multi-Handicaps), Emotionally Disturbed

Hartford Rehabilitation Center, Inc.

***SERVICE AREA**

Domestic

Dusting
Sweeping
Cleaning
Window washing
Waxing, polishing
Manual
Machine
Clothes washing
Hand
Machine
Clothes mending
Ironing
Dish washing
Hand
Machine
Bed making
Simple meal
preparation

Laundry

Sorting
Folding
Stacking
Counting
Wrapping

**SPECIALIZED
SERVICE AREA**

Personal Service
Shoe shine
*Hospital Service
Central supply
Autoclave
Packaging, sorting,
inspecting
Syringes
Needles
Gloves
Messenger

***INDUSTRIAL AREA**

Simple Assembly
(2 to 5 steps)
Small
Medium
Large
Gross
Sorting
Gross to fine
According to
color
size
shape
texture

Inspecting (visual)
 Packaging
 Envelope insertion
 Machine parts
 Wrenches
 Dowel pins
 Etc.
 Boxing into cartons
 Labeling
 Sealing
 Machine operation
 Drill press
 Foot press
 Grinding, butting,
 polishing machine
 Industrial sewing
 machine

*FOOD AREA

Kitchen Helper
 Food preparation
 Clean-up
 Messenger
 Cafeteria Helper
 Sandwich making
 Salad making
 Food portioning
 Bus boy
 Dishwasher
 Hand
 Machine
 Pot washer
 Bus Boy
 Porter

RETAIL AREA

Package wrapping
 Sizes
 Small
 Medium
 Large
 Irregular
 Types
 Similar
 Assorted
 Perishable
 Methods
 Tape only
 String only
 Both
 Gift wrap

*STOCK ROOM

Packing
 Unpacking
 Stocking
 Loading
 Unloading
 Delivery
 Use of cart or dolly
 Messenger
 Order Filling

*Jobs offering the greatest placement potential in the
 Hartford, Connecticut, area.

Verbal
 Phone
 Written
 Marking
 Weighing
 Price-checking
 Inventory

CLERICAL AREA

Filing
 Cards
 Folders
 Mail sorting and
 related activities
 Postage
 Rubber stamp
 Weighing
 Messenger
 Inside
 Outside
 Telephone
 Calling
 Answering

GARAGE AREA

Car washing
 Vacuuming
 Tire changing
 Washing equipment
 Hand
 Machine
 Clean-up

WOODWORKING AREA

Hand tools
 Saw
 Hammer
 Screw driver
 File
 Drill
 Solder
 Power tools
 Drill press
 Band saw
 Jig saw
 Furniture repair
 Painting
 Refinishing
 Repair
 Reseating
 Upholstering

AGRICULTURAL AREA

Mowing lawn
 Power mower
 Hand mower
 Trimming
 Weeding
 Pruning
 Digging
 Raking
 Watering
 Handling wheel barrow

OUTLINE OF JOB TRAINING PROGRAM

Hartford Rehabilitation Center, Inc.

I. CRITERIA FOR ADMISSION

- A. I.Q. between 50 to 75
- B. 16 years of age or over
- C. Ability to travel or learn to travel alone

II. PURPOSE

To evaluate and/or train educable retarded adults
 for competitive employment

III. PRE-ADMISSION

- A. Physical examination
- B. Psychological examination
- C. Social study
- D. Evaluation of the candidate's potential for
 training

IV. SCHEDULE

A. Occupational therapy

1. Pre-vocational evaluation and training
2. Continuing therapy

B. Job training

1. Industrial sheltered shop
2. Woodworking sheltered shop
3. Hospital services
 Training program has been worked out
 with McCook Hospital located next door to
 this facility
4. Stop & Shop. A training program has been
 worked out with this super-market for se-
 lective cases

C. Counseling

1. Trainees
 - a. Individual
 - b. Group
2. Parents
 - a. Individual
 - b. Group

V. INTEGRATION OF PROGRAM

A. Staff conferences

Between individual members of staff who are
 working with trainee. Scheduled as needed

B. Staff meetings

1. Medical reviews
 Every four months. Present: members of
 staff who are working with the trainee
 plus the medical consultant
2. Staff reviews
 - a. Every two months
 - (1) Progress
 - (2) Discharge
 - b. Counselor from the Bureau of Vocational
 Rehabilitation attends staff meetings once
 a month

*This form was originally designed in 1957 for testing
 trainees in the Hartford Association for Retarded Chil-
 dren Job Training Program, and has since been revised
 and includes more disability areas.*

A SELF-CARE PROGRAM FOR THE CHILD WITH PROGRESSIVE MUSCULAR DYSTROPHY

ANN G. MORRIS, O.T.R.

PAUL J. VIGNOS, JR., M.D.

It has been the experience of the muscular dystrophy clinic at University Hospitals of Cleveland that children with this disease are frequently not taught the rudimentary techniques of self-care. Frequently parents display a negative attitude towards training the child to care for himself, since they believe he is unable or will be unable to carry out these functions. In the early stages of the disease there is no real physical limitation which should prevent the child from carrying out normal activities. The ability of the child to care for himself at various stages of his disease has been relatively unexplored in the literature. This makes it difficult for both parent and physician to know which daily activities are physically possible at a given time.

The occupational therapist, in cooperation with the other clinic team members, must analyze the activities that a child can or cannot perform even though his disability is progressive. Concurrently, the role of the parents is recognized as being of primary importance in carrying out this program. Self-care as related to the functional classification of the child has been emphasized in the muscular dystrophy clinic at University Hospitals. Techniques and equipment which will enable the family to care for and assist the patient, with a minimum amount of work on their part, have been explored. For the most part the clinic families have responded favorably to this practical approach.

A study was conducted for a period of three years with 35 male patients with the childhood type of progressive muscular dystrophy. Due to the progressive nature of the disease, six of the patients are represented in two classes during that time. The age range was 5 years to 27 years, and the average age was 11 years. As a result of the data accumulated it has been possible to recognize those patients who are not functioning at their expected physical capacity. The lowered level of activity can frequently be related to psychological factors involving both child and parents.

The purpose of this study was to determine what self-care activities can be performed at a particular level of physical functioning. The ten-step classification¹ used in the University Hospitals clinic was modified for use in this report as follows:

1. Walk and climb stairs without assistance
2. Walk and climb stairs with the aid of a railing

3. Walking, but stair-climbing is so slow it is either impractical or impossible

4. Walking in braces only

A. In braces less than 2 years

B. In braces more than 2 years

5. In wheelchair full time

A. Can propel wheelchair

B. Cannot propel wheelchair

The following material presents the major problems of self-care in the classes listed above. The activities used, as depicted in Figure 1, have been abstracted from the standard activities of daily living (ADL) form used in the clinic.

They include all the basic physical motions used in caring for oneself.

Class 1 included five males aged 5 to 8 years. These children were able to perform all activities normally when tested in the clinic. However, it was found that few of them dressed themselves at home. None were able to tie shoelaces, although Gesel states that a child is able to perform this activity by the age of 6-years.² The primary handicap noted by the family occurred in more difficult elevation activities. The principal problems involved slowness in getting in and out of a passenger car or bus.

Children with progressive muscular dystrophy frequently do less than they should be able to do, based on their muscle strength as determined by manual testing. This was seen in the case of G. who was admitted to the clinic at the age of 5-years. On his initial ADL testing his mother stated that he was unable to wash and dress himself because he was too slow. The patient was non-communicative and made no effort to demonstrate his abilities while his mother was in the room. Subsequently, when alone with the therapist, the boy was found to be capable of performing all self-care activities in an average amount of time. On future visits the mother was permitted to watch the ADL testing. The patient followed instructions and performed well. Although she did not completely accept his abilities even when demonstrated, the mother was not criticized; rather, she was praised for the patient's progress and was encouraged to teach him to do more for himself. Though her initial response to all suggestions continued to be nega-

*This work has been supported in part by the Muscular Dystrophy Association of America. From the Muscular Dystrophy Clinic of University Hospitals, Cleveland, Ohio.

tive, she did respond better as the positive aspects of treatment were stressed.

Class 2 included ten males aged 6 to 10½ years. All dressing activities were performed normally. Some minor difficulties in elevation were noted, i.e., getting up from the floor and out of the bath tub. Half of the group were slow in rising from a chair of regular height. Other than these specific problems, the children were keeping up with their peer groups and participating in most sports activities except those requiring above average physical strength and prolonged running.

Class 3 included eight males aged 7½ to 17 years. Almost all of these patients required aid to get up from the floor, out of the bath tub, and up from a standard-height toilet seat. Such aid included stable environmental objects of varying heights to help with elevation and, in their absence, the assistance of another person. Grab bars were useful in the bathroom since they are easily mounted, and the wide selection available permits diverse application. Dressing activities involving the use of the arms above shoulder height, e.g., putting on a snug-fitting slip-over shirt, were difficult but the patients were self-sufficient in this area.

The following case of a 14-year-old boy in this functional class demonstrates that when motivated by a change in environment or by necessity, a patient may be able to do more than would seem possible in view of rather severe muscle weakness. K's mother was a great stimulus to the patient, encouraging him to care for himself as much as possible. She helped him with activities he could not do, such as getting up from the floor and out of the bath tub. When K. was 15 years old his mother died. In the year following her death he worked out a system of techniques enabling him to be self-sufficient. His schedule started at 4:00 a.m. when he would get out of bed, using tables of various heights to arise. He would then sit in a chair with his legs in extension. By placing heavy books upon his knees he was able to straighten out the flexion tightness of the legs so that he could stand independently. His ingenious solutions covered every daily activity. In the bathroom, by using the usual furniture there plus tables of varying heights, he was able to get out of the bath tub and up from the toilet seat without assistance. Since he preferred socks with elastic tops, he learned that by turning the sock half-way down and placing it over his toes he was able to pull the rest of the sock over the upper half of his foot. Although registering a slow but steady loss in muscle power by manual testing, he has continued to care for himself by means of these self-taught techniques. This case

clearly illustrates the important role of motivation plus ingenuity.

With increasing primary muscle weakness as Class 3 is approached, it was found that children standing less than two hours daily would have an increase in heel cord contractures due to flexor-extensor muscle imbalance, and concurrently a decrease in strength due to disuse muscle atrophy. The use of a standing table at school and at home gave the child sufficient standing time so that the tendency to lower extremity flexion contractures could be met satisfactorily. During the transition period before long leg braces were necessary for ambulation, the child was able to maintain his sense of standing balance and did not become dependent upon a wheelchair. In the early stages of brace training a standing table was also used. Later, as the patient gained confidence, this was not necessary but could still be used to ensure that sufficient time was spent standing.

The inability of the family to suffer the torment of watching the patient struggle with simple daily activities was a great problem. Many parents preferred to dress their children for this reason. This easy solution was often not advisable for emotional reasons. Those patients who were permitted to use their abilities to the fullest, though methods of necessity were abnormal, seemed to have better morale through pride achieved from solving problems for themselves. Increased independence seemed to foster maturity. These patients, taking apparent pride in their abilities, conversed in an adult manner in clinic rather than depending upon their parents to answer questions for them.

Class 4A included six males aged 8½ to 14 years. They managed, with difficulty, to put on shirt and underpants and also applied their braces without assistance. It was impossible for them to put trousers over the braces. They were unable to tie a bow knot tightly enough to allow the shoe properly to support the foot. Because of fairly severe muscle weakness they could not perform elevation activities. They were able to stand for longer periods of time than children who, although slightly stronger physically, were not using long leg braces.

Class 4B included four males aged 9¾ to 15½ years. They were able to handle activities involving primarily wrist and finger motion, i.e., feeding, washing hands and face, and so on. Their level of self-care was similar to that of a wheelchair patient in Class 5. The parents must do much bending and lifting, since these more severely involved patients were unable actively to assist when they were being transferred. However, since they did stand much of the time, and since bracing prevented the progressive development of joint deformities, they were easier to

	1	2	3	4A	4B	5A	5B
1. Sit up in bed from a lying position —		With assistance of objects or another person	With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
2. Turn on abdomen in bed —				With assistance of objects or another person	Unable	Unable	Unable
3. Turn on side in bed —				With assistance of objects or another person	With assistance of objects or another person	Unable	Unable
4. Get off toilet —			With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
5. Get into bathtub —		With assistance of objects or another person	With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
6. Get out of bathtub —		With assistance of objects or another person	With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
7. Cut meat —						Unable	Unable
8. Put on slipover garment —			With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
9. Remove slipover garment —			With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
10. Put on buttoned garment —				With assistance of objects or another person	Unable	Unable	Unable
11. Remove buttoned garment —				With assistance of objects or another person	Unable	Unable	Unable
12. Tie bow knot —	Unable	Unable		Inadequate performance	Inadequate performance	Unable	Unable
13. Bed to erect position —			With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
14. From floor to erect position —		With assistance of objects or another person	With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
15. Arise from standard height chair —		With assistance of objects or another person	With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
16. Get on and off bus —		With assistance of objects or another person	With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable
17. Get in and out of passenger car —		With assistance of objects or another person	With assistance of objects or another person	With assistance of objects or another person	Unable	Unable	Unable

KEY:






	Independent
	With assistance of objects or another person
	With difficulty
	Unable
	Inadequate performance

Figure 1. Relationship of self-help activities to functional classification in progressive muscular dystrophy.

care for than the wheelchair patients. The latter usually developed more severe contractures in the weight-bearing joints due to the constant position of flexion of these joints, and also frequently became obese due to minimal energy expenditure.

The following aids were found to be helpful by clinic patients:

1. Raised toilet seat permits easier lifting.
2. Bath tub stool used with shower spray allows the parent to bathe the patient in the tub with decreased physical strain on the parent's back.
3. High stool enables the patient to arise and sit down independently, or with a minimum of help.
4. Buttoned shirt, one size too large. It is difficult to put on the proper size due to the weakness of the shoulder and abdominal muscles.
5. Socks one size too large, without elastic tops.
6. Crib-size hospital bed with side rails enables the patient to turn more easily, while those with adequate strength use the bars as an aid in rising. The additional height permits some patients to get out of bed independently.

Long leg braces allowed the patients to be more independent when performing such duties as using the toilet or getting a glass of water. Since they were mobile in braces, they preferred to stand while watching television, doing homework, and even when playing games. Due to the difficulty in walking on uneven terrain, it was more feasible to use a wheelchair for transportation outside the home when the child was in braces.

P. was a typical example of the functional abilities of Class 4B. He was a 15-year-old who attended the local high school. His self-care activities were limited to feeding and brushing teeth. He had diverse interests and participated in many activities in spite of marked weakness. The family made every effort to utilize his intellectual abilities to compensate for his physical weakness. A Volkswagon station wagon was purchased since it was found to be the most efficient method of transporting the patient, for his wheelchair could easily be put aboard. Thus, sightseeing gave the patient new interests as well as a great deal of enjoyment and provided an experience to share with others. Three years ago he started piano lessons. However, with progressive shoulder weakness, he began to have difficulty in playing. His father attached a metal rod parallel to the keyboard, and by resting his forearms on this the patient was able to reach all the keys and continue this satisfying hobby. His interest in music was an excellent diversion since his knowledge permitted him to gain equal satisfaction from concerts and records-activities requiring no physical effort.

Class 5A included three males aged 11½ years to 15 years. Due to their severe limitations in shoulder and trunk girdle strength, it was more expedient to list the functions they could perform independently. These included

feeding, brushing teeth, washing hands and face and other activities using primarily distal finger and wrist motion. These boys enjoyed painting, building model cars and similar small craft activities, and this was encouraged in order to emphasize the positive aspects of their existence.

Various patterns of muscle substitution were necessary to perform tasks involving the upper arm and shoulder girdle muscles, i.e., combing hair. In activities where elbow flexion was used it was found that the elbow resting on a wheelchair board of the proper height (foam rubber under bony prominence for thin patients) was most advantageous. Overhead slings and rocker feeders were found to be occasionally helpful if the patient was properly trained in their use. Admittance to the hospital for a short period of intensive training was found to be effective and the patients continued to use the equipment at home.

When ordering a wheelchair the following features were found to be desirable: 8-inch casters, brakes, extended leg rests, removable arms, arm boards. A zipper back for patients whose excessive weight made additional lifting impractical, permitted them to be placed in a supine position for part of the day in order to stretch out hip contractures, and for a necessary rest period. The wheelchair board enabled the patient to participate in as many activities as his limited physical condition permitted. The extended leg rests had to be used daily to prevent flexion contractures of the knees. The narrow doorway to the average bathroom does not permit passage of the standard wheelchair. A combination wheelchair commode eliminated the problem of lifting the patient and carrying him into the bathroom. Families with limited space preferred this combination rather than a separate commode.

Due to excessive weight and largely non-functioning muscles, the parents found the patient-lifter a useful piece of equipment when they had learned to use it properly. A major problem was storage space for this relatively large and bulky piece of equipment.

Patients with marked joint deformities often had difficulty in finding a comfortable position in bed and required frequent turning, sometimes as often as five and six times nightly. This may have fulfilled a psychological need on the part of some patients and/or parents. The frequency of turning was diminished by the use of foam rubber mattresses.

Foot boards to diminish heel cord contractures and overbed cradles to keep covers off the legs are recommended. This may help to retard development of equinovarus foot deformities. However, if deformities have already developed, one

must be careful not to force the sides of the feet against the footboard. The overbed cradle enables patients to move more freely in bed without the weight of bed-clothing; this is particularly helpful in winter.

Upon testing it was found that long-handled utensils, so often used in other locomotor diseases, were not successful with dystrophy patients due to marked shoulder and elbow extensor weakness. Conversely, by limiting the range of motion the patient was able to use the forearm flexors more effectively. Class 5 patients were unable to use pick-up sticks due to lack of muscle strength.

From the above data it has been found that the ability to handle daily activities at various stages of disease can be predicted fairly accurately by the use of a simple functional classification. Therefore, it is possible to separate the factor of "working at a lower level than physically necessary," as cited by Milhorat,³ and to help the patient to be more self-sufficient.

An example of working at a lower functional level than was necessitated by the physical state was seen in the following case. W. was admitted to the clinic at the age of 10 years. He had been confined to the wheelchair for approximately one year following a fall. On his ADL test he performed all activities except those involving elevation and walking, and would fit into Class 4A except for his inability to walk. When asked to take off his shoes he was able to bend over and lift up his foot without difficulty. It was felt, on the basis of his ADL abilities and his muscle test, that he had been prematurely confined to the wheelchair and he was admitted to the hospital for an intensive rehabilitation program. Following surgery for relief of heel cord and iliotibial band contractures, he was fitted with long leg braces for ambulation. This period of re-training took place in a convalescent hospital for children. The patient learned to walk independently in braces and, as his physical abilities increased, there was marked improvement in his morale and school performance. The patient's family was delighted with his progress which made him easier to care for. The amount of lifting required had been decreased appreciably and his independence for activities of daily living had greatly increased. With increased activity he had lost twenty pounds of excess weight.

By studying and recording patients' ingenious solutions to their problems it is possible to gain new methods of self-care that can be imparted to other families. The knowledge that another patient has been able to analyze and initiate new

and effective self-care procedures is most gratifying and encourages families to allow patients to try new activities. As the patient improves in self-care, his confidence and self-esteem grow. The cooperation of parents is necessary, since they provide the patient with the opportunity and encouragement to work out schemes for using his limited muscle power to the greatest advantage. Since at present we can do little to affect the basic disease process, we must do our utmost to ensure a maximal utilization of patients' available resources.

SUMMARY

The activities of daily living have been analyzed in 35 patients with childhood type of muscular dystrophy. This has been correlated with a five point functional classification and the development of a self-help program for dystrophy patients has been described.

REFERENCES

1. Archibald, K. O., and P. J. Vignos, Jr. "A Study of Contractures in Muscular Dystrophy." *Arch. Phys. Med.*, 40:150, 1959.
2. Gesell, A. *The Child From Five to Ten*. Harper and Bros., 1949, pp. 105, 142.
3. Milhorat, A. D. *The Diagnosis of Muscular Dystrophy*. Proceedings of the 3rd Medical Conference of M.D.A.A., 1954.

In Memoriam

Mrs. Nada Stock Ballator
2130 Garstland Dr.,
Roanoke, Va.
Deceased, October, 1959

Miss Edwinna Cearley
2634 Dragonwick Dr.,
Houston 45, Tex.
Deceased, April, 1960

Mr. Lynn Millard
39-60 52nd St.,
Woodside 77, N. Y.
Deceased, August, 1960

Miss Mary K. Minglin
27 Burnett St., New Norfolk
Tasmania, Australia
Deceased, June, 1960

Miss Sofia Perez
Reparto Metro M-56
456 Rio Piedras, P.R.
Deceased, September, 1959

Mrs. Janet S. Small
2 Prospect Hill Rd.,
Cromwell, Conn.

Case History

FINGERPAINTING FOR THE HOSTILE CHILD

LELA A. LLORENS, O.T.R.

GREGORY G. YOUNG, M.D.

The milieu therapy concept prevalent throughout the children's service at the Lafayette Clinic utilizes all units that influence the patient's behavior to further the psychotherapeutic treatment procedure and achieve its goals. This paper is a presentation of the specific use of occupational therapy in the furtherance of a specific goal in psychotherapy.

This case involves Douglas, a ten-year old boy, who was initially admitted because of his unruly, aggressive school behavior, poor peer adjustment, low frustration tolerance, and phobias centering

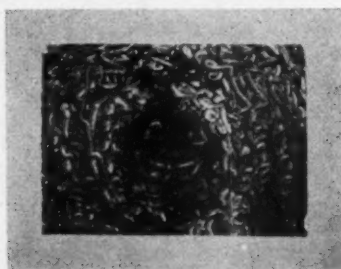


Figure 1.

around the cutting of his toenails. Douglas' first year of hospitalization was characterized by his resistance in psychotherapy, reluctance to become involved in the residential treatment plan, and minimal progress. At the end of this time it was decided that a different approach would be initiated which would include more structuring in the various therapeutic endeavors and a greater emphasis upon his preoedipal conflicts and fixations.

A plan was devised which would utilize the patient's occupational therapy hour to focus upon his great difficulty in dealing with his hostile, sadistic thoughts and impulses. The feeling states revealed in his activity and relationship would be recognized, clarified, accepted and consciously dealt with in occupational therapy and then directed toward the psychotherapeutic sessions. The activity chosen for Douglas was fingerpainting. The reasons for choosing this particular activity were the opportunity it afforded for graphic as well as hostile, aggressive physical expression and Douglas' demonstrated reluctance to engage in "dirty" and "messy" activities. The plan for presenting the activity to the patient called for gradual reduction of frequency in accordance

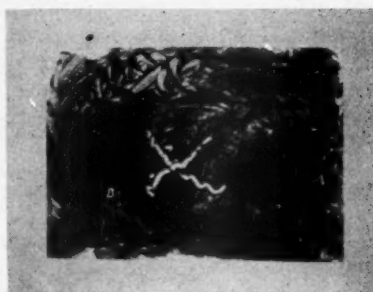


Figure 2.

with his ability to carry over his expression into psychotherapy. The activity was initially scheduled every day for two weeks and was subsequently reduced to twice per week, then to once per week, and finally terminated.

After initial mild resistance, Douglas' attitude toward the activity was one of superficial enjoyment, his productions were characterized by organization and the use of bright colors. (See Figure 1.) His attitude toward the therapist was

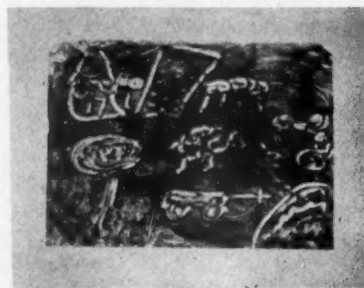


Figure 3.

passive and accepting. As the structure remained consistent and he became more involved, Douglas gradually became more negative, resistive, hostile and rejective toward the activity and his productions became progressively less organized. He began using darker colors and expressing some fantasy material. (See Figures 2 and 3.) His attitude toward the therapist became hostile as evidenced by verbal berating and hostile projections of blame. In accordance with the treatment attitude adopted for this patient, his hostile feelings and remarks were accepted and clarified by the occupational therapist and the level of hostility engendered by the activity was sufficient to carry over into psychotherapy for interpretation and working through.



Figure 4.

As Douglas progressed in this activity, it became more and more difficult to engage him in the fingerpainting. He finally rejected the activity completely. His last productive session was six weeks from the beginning of the project. He produced seven paintings in rapid succession, all depicting "mushroom clouds of atomic explosions" using black as his dominant color. (See Figure 4.) At his point, his attitude toward the therapist was one of open hostility. His rejections were characterized by verbal shouting, swearing and attempts to strike out physically. He displaced much of his hostility onto the environment, however, our main objective was accomplished. His hostility had reached the surface where it could be dealt with more effectively in psychotherapy and since that time psychotherapy has progressed markedly. Douglas went on to deal constructively with his oedipal fears and eventually to return to his home environment.

This method of facilitating hostile expression aided in the overall therapeutic process and specifically in attaining a desired response. Other factors which entered into the success of this medium with this particular child were: (1) The fingerpainting activity substituted for, rather than supplemented his regularly scheduled occupational therapy hour; (2) the medium used conflicted with his striving for neatness; and (3) the activity was introduced at an optimal point in psychotherapy.

REPRINTS

Reprints are convenient for teaching files in hospitals. If you would like a few copies of articles appearing in this issue, your order will be honored if enough requests from others are received to total the minimum order of 50 for an article. Place your orders before the 25th of the month of publication.

Use of Self-help . . .

(Continued from page 291)

the competent therapist cannot ignore the responsibilities for its therapeutic use. A ready knowledge of personality development and of psychological terminology is essential in order to communicate with others about therapeutic use of the self. Application of these concepts to clinical cases and group discussion of one's feelings in specific clinical situations helps in better understanding the relationship of the occupational therapist with a patient.

Our experience also illustrates the role of a psychiatric consultant in occupational therapy staff development programs. We advocate that such consultants be used in an organized manner throughout the practice of occupational therapy and that such use be regarded as an important and regular part of occupational therapy on-the-job training programs. Only through such continuing experience can the occupational therapist take his place as a fully qualified member of the professional medical team.

SUMMARY

With proper guidance group on-the-job training can be used to excellent advantage to upgrade the clinical skills of the occupational therapist. The more personal the area of knowledge to be explored, the more difficult the undertaking. The progress of such a group is markedly affected by the degree of experience of its members.

The therapeutic use of the self in occupational therapy is the understanding of the relationship between therapist and patient and the use of this relationship to modify patient's behavior. It is an inherent part of all occupational therapy. The self-knowledge and awareness of patient behavior it requires, strongly indicates a need for continuing planned utilization of a psychiatric consultant in occupational therapy staff development programs.

REFERENCES

1. Frank, J. D. "The Therapeutic Use of Self and Panel Discussion," *Proceedings, 1957 Institute-Conference, Cleveland, Ohio*. New York: American Occupational Therapy Association, 1959.
2. Bales, R. F. *Interaction Process Analysis*. Cambridge: Addison-Wesley Press, 1950.
3. Caudill, W. *The Psychiatric Hospital as a Small Society*. Cambridge: Harvard University Press, 1958.
4. Freeman, T., J. L. Cameron and A. McGhie. *Chronic Schizophrenia*. New York: International University Press, 1958.
5. Whitehorn, J. G., and B. C. Betz. "Study of Psychotherapeutic Relationships between Physicians and Schizophrenia Patients," *American Journal of Psychiatry*, CXI (November) 1954.
6. Aronson, J. A., S. Polgar and H. Silverstein. "Staff Relationships on a Milieu Therapy Ward" (in preparation).

Picture Page

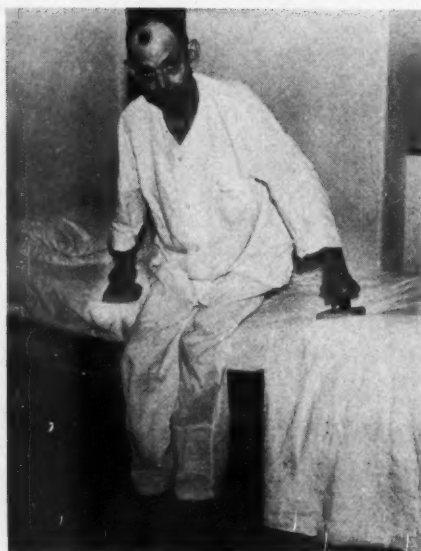


Pedal Adaptation



—Pictures from US Public Health Service

Adaptation for lever of printing press: for shoulder abduction, forward flexion and elevation. Can also be used sidewise to clear the feeding table when a patient has an above the elbow cast.



Push-up Blocks



—Pictures from VA Consolidated Hospital, Little Rock, Arkansas

Push-up blocks were made for an arthritic patient with badly contracted hands. The only way he was able to push himself up from the bed or chair was by using the dorsum of the hands, putting his weight on the metacarpal-phalangeal joints. This caused ulcerations of the skin over these joints and constant irritation of the joints themselves. This cleared up after he started using the blocks.

The blocks were constructed of one-inch pine, padded with felt to prevent slipping, with hand grips from an old pair of crutches suspended between angle irons with the bolt from the crutches. As all material used was salvaged, there was no cost involved.

The patient has used these blocks continuously since his discharge from the hospital. He even brought them back with him when he was hospitalized again with pneumonia. He stated that he also used them to rest his hands on when sitting watching TV.

NATIONALLY SPEAKING

Bargain in Print

Occupational therapists are always working on a tight budget so they recognize a bargain. But do they really know what a bargain they are getting in the *American Journal of Occupational Therapy*. At its advent in 1947, \$3.00 of the membership dues of \$6.00 was allocated to AJOT. Since that time salaries and travel expenses have been increased, printing costs have increased. Yet the amount an individual OT pays has never been changed.

Your present editor started working in 1949 on a half-time basis and is now on a two-thirds basis. Secretarial assistance was instituted in 1949 on a half-time basis and gradually increased to a full-time job with the upgrading of the position from "secretary" to "assistant to the editor."

Since 1954 bookkeeping details for AJOT handled through the New York office have been allocated to the AJOT budget. Over the years advertising expenses have increased from 15 per cent to 35 percent and have been met by raising advertising rates.

In 1953 the Buyers' Guide was published as Part II of the March-April issue. The Conference Issue was added in 1955 which increased the copies of the Journal from six to eight. In 1960 these two issues were bound into the regular issues. The Buyers' Guide was included in the March-April issue, the Conference Issue included in the July-August issue. This consolidation did not

eliminate pages, only covers, so there is still the additional number of pages of reading material which the advent of these issues created.

The increase over the years in the number of pages and the advertising income have been listed in Figures 1 and 2. The history of AJOT has been a continual increase of time and money, but the cost to the individual occupational therapist is exactly the same as in 1947.

Additional expenses have been met by increased advertising revenues and by increased circulation rates to non-occupational therapists whose numbers have steadily grown and now number over a thousand. These sources of revenue have reached their maximum ceiling for the next few years. Any further expenses will have to be allocated to AOTA members. When that will be necessary it is not possible to forecast, but there is no doubt that for some years AJOT has been a lone publication in keeping its original subscription price and has been indubitably a bargain for AOTA members.

—Lucie Spence Murphy, O.T.R.
Editor

From the Education Office

It is with pleasure that the education office announces the names of those examinees who successfully completed the June 24, 1960, registration examination.

Allen, Anita A.	Condrey, Patricia P.
Altland, Nancy R.	Conklin, Cynthia T.
Amacker, Judith B.	Coons, Mary E.
Anderson, Bernice S.	Cooperman, Martha L.
*Anderson, Jane E.	Cote, Priscilla
Andrews, Carol A.	Cotton, Jesse W.
Arnet, Judith K.	Crawford, Rosalyn A.
Arnold, Betsy	Crockett, Davy B.
Beard, Joan E.	Currie, F. Catherine
Bez, Marilyn	DeYoung, Zona L.
Boehlke, Sara J.	Dix, Jean M.
Blaisdell, Marilyn L.	Dodge, Janet C.
Bogumill, Ruth A.	Driscoll, Mary C.
Bollinger, Sara J.	Dunbar, Carol B.
Boone, Sara J.	Eastman, Barbara A.
Breazeale, Barbara A.	Eggers, Christine M.
Brehmer, Ann M.	Ellis, Mary J.
Brown, Cornelia D.	Elmquist, Nannette J.
Brown, Nancy W.	Eschenlauer, Susan D.
Brown, Roberta G.	Fedors, Elaine J.
Bryan, Mary L.	Finsthwait, Anne L.
Buckey, Carol Kay	Fleury, Laura J.
Burton, Phyllis T.	Follensbee, Phyllis M.
*Caine, Caroline G.	Foster, Mary Jane
Card, Jo-Ann	Fraser, Sally J.
Carter, Barbara M.	Fraticelli, Joanne C.
Chinnock, Margot	Fukumoto, Priscilla H.
Chytry, Cheryl A.	Gersh, Maxine L.
Conde-Morales,	Gessner, Dorothea H.
Maria de L.	Giannoni, Ann M.

SURVEY OF PAGES IN AJOT

Year	289 pages plus 65 advertising pages
1950	271
1951	74
1952	284
1953	75
1954	272
1955	85
1956	283
1957	93
1958	299
1959	96
1960	316
	64
	346
	73
	338
	67
	288
	59
	340
	55

Figure 1

AJOT ADVERTISING INCOME

Year ending Aug. 31, 1950	\$ 6,267.95
1951	6,526.00
1952	8,559.83
1953	9,474.97
1954	12,272.23
Year ending June 30, 1955	9,258.85
1956	12,990.75
1957	10,043.31
1958	10,767.53
1959	11,852.52
1960	12,606.05

Figure 2

Giese, Anita E.
 Giles, Linda B.
 Gohl, Azela K.
 Gordon, Nancy C.
 Gordon, Nancy W.
 Gottlieb, Juliet P.
 Granstrom, Marlene R.
 Green, Nancy R.
 *Griggs, Caroline W.
 Groth, Irmgard
 Hahn, Marie V.
 Haines, Lynda L.
 Hammond, Elizabeth K.
 Hansen, Nancy J.
 Harbeson, Leon G.
 Harrison, Marion B.
 Harvey, Elizabeth A.
 Hazen, Judith M.
 Herr, Beth M.
 Higgins, Nancy E.
 Hill, Margaret B.
 Hinton, Joy A.
 Hoff, Margaret Ann
 Hopkins, Charles F.
 Hotchkiss, Mary E.
 Howard, Margaret B.
 Howe, Diane M.
 Howson, Jacqueline M.
 Hundley, Virginia L.
 Huser, Sister Mary
 Petra
 Innis, Barbara A.
 Ippolito, Joanna G.
 Izumizaki, Kikue
 Jacobsen, Leah R.
 Johnson, Margaret A.
 Johnson, Paul M.
 Jones, Roberta M.
 Kaplow, Norma D.
 Karling, Sarah M.
 Kibel, Isabel R.
 Kibler, V. Anne
 Kile, Marie G.
 Kinney, Lillian T.
 Kipp, Patricia D.
 Kirkpatrick, Sharleen A.
 Knobel, Eileen S.
 Kristiansen, Sonja R.
 Kulkarni, Madhav R.
 Ladd, Barbara J.
 Lannefeld, Judith V.
 LaQue, Katherine F.
 Lee, Millicent E.
 Lieberman, Edith
 Lochbaum, Margaret R.
 Loftus, Sue Anne
 Lopes, Glenda M.
 Lowe, Julia M.
 Luckett, Nina K.
 McLemore, Virginia L.
 Manges, Joan L.
 Marks, Iris H.
 *Marlin, Janet E.
 Mayer, Barbara S.
 Mayer, Patricia R.
 Meyer, Roberta M.
 Miller, Barbara G.
 Miller, Johanna M.
 Miller, Marie B.
 Miller, Mary K.
 Mills, Miriam H.
 Mindek, Helen
 Mooney, Mary Kay

Moore, Anna R.
 Moore, Mary-Ellen
 Morehouse, Nancy A.
 Morgan, Nancy S.
 Moulin, Nancy
 Mount, Judith A.
 Myers, Marian H.
 Nanna, Nancy C.
 Nash, Aldina R.
 Neely, Sally Z.
 Neff, Diane R.
 Negin, Yolanda D.
 Negron de Ascencio,
 Gloria M.
 Neher, Marcia S.
 Nenortas, Ina K.
 Nille, Anita
 Noe, Sara T.
 Onnela, Darlene M.
 Orth, Jean D.
 Osmundson, Rebecca A.
 Ouradnik, Judith A.
 Ott, Barbara D.
 Overly, Kenneth L.
 Pacioni, Carole J.
 Pastorino, Johanna B.
 Patterson, Elizabeth H.
 Patton, Norma S.
 Payne, Elaine J.
 Pearson, Margaret A.
 Peters, Mary Louise
 Pfeiffer, Fredine
 Pihl, J. Trilby
 Pilger, Mareen V.
 Perry, Loyal I.
 Pinkerton, Peggy A.
 Puehler, Nancy A.
 Ray, Paula F.
 Reed, Eva H.
 Rehmar, Jean A.
 Rhoads, Janet B.
 Rice, Sharon
 Robison, Kristine B.
 Rodriguez-Rivera,
 Angel L.
 Roesler, Karen J.
 Rogers, Marjorie E.
 Rowen, John C.
 Salvucci, Angela B.
 Sanchez-Cruz, Carmen I.
 Schmidt, Darlene R.
 Schmidt, Shirley D.
 Schnepf, Stanley C.
 Schutt, GERALYNN L.
 Scott, Adele G.
 Scott, Jane E.
 Selleck, Alice J.
 Siela, George F.
 Simmons, Gail R.
 Smith, Freda H.
 Smith, Glenda S.
 Smith, Grier
 Sours, Adda E.
 Spencer, Elinor A.
 Spielman, Georgia R.
 Steckling, Dorian D.
 Stelling, Susan R.
 Stern, Lorraine Z.
 Stockett, Jeanette L.
 Stoutz, Nancy P.
 Takahashi, Martha S.
 Terry, Norma J.
 Thatch, Gloria L.

Thomas, Francine K.
 Throckmorton, Ann L.
 Towbin, Elaine E.
 Treijs, Arijia
 Twohy, Judith J.
 Walker, Barbara A.
 Wallbridge, Mary Ann
 Watson, Joy L.
 Watson, Kay L.
 Watson, Paulette M.
 Watson, Shanna D.
 Weakley, Dorothy J.
 Webb, Penelope L.

*Weeks, Donna M.
 Wheat, Marcie R.
 Whedbee, Ruth C.
 Whitney, Janet C.
 Wise, Cynthia A.
 Wilson, Barbara R.
 Wittenberg, Jo Ann
 Wood, Frances K.
 Yasui, Jean C.
 Zaun, Roberta L.
 Zeller, Lorena A.
 Zimmerman, Polly M. A.

*Completed with Honors

—Virginia T. Kilburn, O.T.R.
Director of Education



—Australian News & Information Bureau Photograph

Some members attending the international meeting of occupational therapists in Sydney, Australia. From left: Mrs. M. J. Gibbons and Miss Dulcie Goode of Australia, Miss Glenda Lopes, India, Mrs. Thelma Cardwell, Canada, Miss Helen Willard, United States.

WFOT COUNCIL MEETING

Thirteen women from eight countries attended the fourth bi-annual council meeting of the World Federation of Occupational Therapists in Sydney, Australia, in September. The council meets every two years in a different country. This was the first time it had met outside Europe or the United States since the Federation was founded in 1952.

Unification of training techniques and domestic matters affecting the Federation were discussed in Sydney. The next meeting will take place in Philadelphia after the Federation's third international conference there in 1962. The conferences are organized at four-yearly intervals and have taken place previously in Edinburgh and Copenhagen.

The president of the World Federation, Miss Clare Spackman, assistant professor of occupational therapy at the University of Pennsylvania attended the Council meeting in Sydney. Others at the meeting were Miss Helen Willard, professor of occupational therapy, Pennsylvania University, and president of the American Occupational Therapy Association; the World Federation vice-president, Miss Dulcie Goode, director of the Victorian Training School, Melbourne; Mrs. Thelma

Cardwell, secretary-treasurer, lecturer at the University of Toronto, Canada; Mrs. Glyn Owens, director of the Liverpool (England) School of Occupational Therapy and Miss Marion Brennan of England; Miss Frances Rutherford of Auckland, New Zealand; Mrs. Elisabeth Sturup from Copenhagen; and Miss Glenda Lopes of India. Miss Olive Rayne of Melbourne, formerly of Pretoria, represented South Africa.

Queries and Answers

The clinical procedures committee urges that you, the practicing therapist, use this column as a means of getting some help with your perplexing problems. Submit your questions to either Captain Lottie V. Blanton, AMSC, Box 326, Letterman General Hospital, San Francisco, California, or to Miss Irene Hollis, O.T.R., editor, "Queries & Answers," field consultant in rehabilitation, American Occupational Therapy Association.

We also invite you to express a difference of opinion to answers given or to supply us with additional information related to any of the subjects introduced here. Make this an organ through which the voice of the clinical therapist can be heard. The success of "Queries & Answers" depends upon your participation.

PRESCRIPTION VS. REFERRAL

Question: What are the professional and legal implications of receiving from the physician an occupational therapy referral rather than the "traditional" prescription? This problem was discussed in relation to psychiatry in an article in the July-August, 1959, AJOT. My present position is in a geriatric and chronic disease hospital and home (for patients of all ages) which has a department of physical medicine and rehabilitation and an occupational therapy student training program. My previous experience in a department for inpatients and outpatients of all ages helped to form my complete preference for the referral. C.B.A.

Answer: The professional and legal implications of an occupational therapist working under a referral from a physician rather than the "traditional" prescription are the same. It must be remembered that only a licensed doctor of medicine has the right to diagnose, "prognose" and prescribe treatment. One's interpretation of the word "referral" is the problem.

If a patient is referred to you for treatment, the same basic information should be imparted to you by the physician. This should include the diagnosis, if one has been made, and the aim of the treatment the physician wishes you to accomplish.

If no diagnosis has been made and the physician is using your discipline to help form one, you should be so advised and report all facts to him. The article by Dr. Chas. V. Letourneau, "Legal Aspects of Occupational Therapy," page 177, Vol. XIV, No. 4, AJOT, is an excellent one to read on this subject.

—G. Margaret Gleave, O.T.R.,
Racine, Wisconsin

MENTALLY RETARDED

Question: What can be recommended as to procedures for occupational therapy in cottages (living quarters) in a state hospital for the mentally retarded? R.C.E.

Answer: The occupational therapist in my opinion can provide a more well rounded program in the cottages if the aides or attendants are indoctrinated and are able "to call for help when needed." One of the most important functions an OT has in the cottages is to have the patients feel a sense of accomplishment and purpose in wanting to dress up their cottages and make them home-like before they participate in the OT session. It would be a sound procedure to initiate a self-care program where needed. In some residential centers the cottage life program becomes the transitional center for those able to leave the center for subsequent life in the community. Therefore, every attempt needs to be made to make this experience as "normal" as possible.

—William A. Fraenkel, Ph. D.
Consultant, National Association for Retarded Children

COMMENTS ON PREVIOUS COLUMN

(The following paragraph is an additional comment on the question entitled *CASE LOADS* in the July-August issue of AJOT, p. 229.)

It is not unusual to find therapists with low or high case loads because factors in the particular situation, rather than the therapist, have regulated the work load. While all the factors listed certainly do influence the number of patients a therapist may carry, it is suggested that each therapist should define the *optimum* number of treatments he should give per day, giving consideration to the objectives of the treatment and to his other appropriate *professional* responsibilities. This number should then be constant and factors, such as available space, equipment, personnel, preparation time, and even hours when patients can be treated, should then become the variables which he diligently strives to alter to facilitate his basic purpose: giving adequate treatment to an optimum number of patients.

—Carlotta Welles, O.T.R.,
Altadena, California

LETTERS

To the Editor:

This letter comes with reference to my report of the "Education of Occupational Therapists in the United Kingdom" published in Vol. XIV, No. 3, May-June of the *American Journal of Occupational Therapy*. Miss E. N. Macdonald, principal of the Dorset Home School of Occupational Therapy, Oxford, has requested that there be clarification of the reason for the statement of non-inclusion of Dorset House in the report.

Exclusion from the report was requested by the principal when it was determined that the investigator could spend only two days at the school. This was based on the feeling that "it is impossible to assess methods and values in a brief visit, and we are anxious to check some misinterpretation which we have found is taking place through attempts to analyze in too short a time or through uninformed hearsay" (Principal, Dorset House School, 31 March 1959.)

Thank you for your courtesy in publishing this letter.

Very truly yours,
Marie Louise Franciscus O.T.R.
Associate Professor and Director
of Occupational Therapy Courses
Columbia University

Dear Col. McDaniel:

Perhaps I have overlooked something in your excellent paper (July-August AJOT, p. 195). If so, my apologies, but I think the OT schools should give voluntary courses in the principles of asepsis, the application of dressing to wounds, and bandaging. Also technique of pulse and respiration recording and other functions. They already know enough about anatomy. They also have manual dexterity and would be admirable nursing assistants.

I'm sure physicians and surgeons would cooperate in giving instruction.

With many good wishes,

Sincerely,
W. R. Dunton, Jr., M.D.

Dear Doctor Dunton:

Thank you so much for your letter. You did not overlook anything in the article on the role of the occupational therapist in disaster situations for I made no mention of the responsibilities of the OT schools in the training program.

You will be interested to know that the school directors had had a previous report from me in 1957. At that midyear meeting I outlined to them some of the thinking and planning that we had done within the Army Medical Specialist Corps with regard to the disaster roles of the dietitian, physical therapist and occupational therapist. The following year several school directors made special mention of the first aid training that their students were receiving. In one school the OT students were joining the medical students in their MEND (Medical Education for National Defense) series of lectures. This was an encouraging beginning but I do not know how much else has been done along this line.

I agree with you that physicians and surgeons (and nurses) would be glad to cooperate with us in teaching us the essentials that we need but first we have to awaken our lethargic group to their need for this information. This is being done gradually through the state OT association civil defense committees. It is a slow process, however, and this is discouraging to those of us who believe that foresight with preparation is much more to be desired than hindsight with regret.

I am no longer at Walter Reed General Hospital but am assigned to the Historical Unit at Forest Glen to assist in the preparation of the history of dietitians, physical therapists and occupational therapists in the U. S. Army Medical Service. The period covers the years 1917 through 1960 and the assignment is a most interesting as well as frustrating one.

My best wishes to you.

Sincerely yours,
Myra L. McDaniel
Lt. Colonel, AMSC

To the Editor:

In reply to the letter in the September-October issue of AJOT concerning my article, "Planning Occupational Therapy for Schizophrenic Children," I would like to say that I answered a letter Mrs. Kaplan and Mrs. Bikofsky sent to me last summer. However, for the benefit of those who may be interested in the defense of my article, I present the following explanations to their disagreements:

1. The first disagreement was in regard to the children releasing their tensions and aggressions in good play activities, and yet my stating they are "never allowed to do what they will with a ball of clay." Mrs. Kaplan and Mrs. Bikofsky were confusing two different types of activity. They failed to notice that the medium of clay was described under the category of guided creative activity and *not* as a play activity. These activities were described in regard to their use with Groups A & B only and the children in these groups are chronic and rarely, if ever, in contact. If they were given clay without guidance, they would merely sit and stare into space, look out the window, mutter to themselves, etc.

2. Also questioned was fingerpainting being governed by the therapist. Let me give some examples of this. For instance, the children who are more comprehensive and in better contact (perhaps Group B) fingerpaint Easter eggs, pictures describing a story told by the therapist, or maybe a picture depicting their favorite TV program. The therapist merely gives the "idea" as these children are rarely motivated enough to proceed on their own. However, children in Group C or D that have shown they are capable of handling the medium *acceptably* and express the desire to do so are left on their own.

3. As for insisting that the child control his impulses, I refer back to my article again where I stated to the effect that the entire children's staff at Northville State Hospital feel it is far better to help a schizophrenic child learn to hold back bizarre creativity and thinking and to concentrate on progressively acceptable behavior which will enable him to return to his normal group of peers outside the hospital. This theory was evolved at Northville therefore no psychiatric references were called for.

4. The last criticism was in regard to opportunities for the child to develop cooperativeness as well as initiative and independence. As the child progresses, this particular goal is stressed more strongly. Again I refer back to the article where I mentioned Group D's own planning and carrying out of many of their group projects. Also the other groups were provided with games such as Cat and Mouse, which I described, which gives them opportunity to be a part of the team, to be a leader, or to be a competitor. As for independence, their individual craft projects afford this development.

I would like to suggest to Mrs. Kaplan, and Mrs. Bikofsky that they may have read into the article more severity and repression than was really exercised. The children have plenty of opportunity to express themselves but in the Northville setting where there are never enough personnel to give each of these very dis-

turbed children the individual attention he really needs, the staff felt structured activities that can be controlled within a group situation are of far more efficacy in helping the child develop the ego strength he has to have than a similar amount of random expressive play that could go on and on in the same unhealthy manner. I would like to state again as I did in my article that this program is far from ideal. When the time comes that state hospitals have adequate personnel per patient and facilities planned especially for children, there will most likely be changes more akin to individual attention and therapy.

Most sincerely,
Irene C. Rousos, O.T.R.

To the Editor:

Re: Rousos' article and Kaplan and Bikofsky's letter. It seems to me that underlying and crucial to Kaplan and Bikofsky's argument with the views expressed in the article by Rousos is a conception of schizophrenia which is fundamentally different from that implied by Rousos. Throughout her paper, Rousos stresses the importance of helping schizophrenic children learn to control their impulses and to suppress and repress psychotic tendencies, or at least to permit them only metered expression. On page 138, Rousos states this belief directly: "This type of guidance with creativity is an attempt to control the child's impulses and prevent the release of psychotic material, as we feel it is far better to help a schizophrenic patient, even a child schizophrenic, learn to hold back bizarre creativity and thinking and to concentrate on progressively acceptable behavior which will enable him to return to his normal group of peers outside the hospital." Rousos sees occupational therapy as having an important role in the re-education of schizophrenic children. (The last two paragraphs of her article are particularly relevant here.) It may be inferred that she sees schizophrenia as an illness in which learning, especially of controls and other interpersonal skills, has somehow gone astray. The emphasis is on re-education.

Kaplan and Bikofsky, on the other hand, seem to feel that it is crucial for the child to *release* something before he can be helped. They say, "How can the psychotic child be expected to become 'normal' if the bizarre feelings are not released?" It is doubtful that they can find much research data with which to support their contention that, "By keeping them (bizarre feelings) within himself at this time a reoccurrence of his psychosis seems inevitable at some future time."

A similar dichotomy in conception of schizophrenia appears in much of the psychiatric and psychological literature. Running through the literature on psychotherapy with child and adult schizophrenics are similarly opposing views. Some therapists contend that intensive therapy to get at the source of the illness, including material such as "bizarre feelings," is essential. Other therapists argue with equal cogency that the therapeutic approach should be one which emphasizes suppressive and repressive defenses; probing is studiously avoided, reality is emphasized, defenses are shored up, and presumably the patient gains increments in ego strength. Proponents of the latter approach usually do not see catharsis in and of itself as therapeutic, but, on the contrary, see it as permitting the patient to wallow in his illness at the risk of fixing pathological behavior patterns even more firmly.

In my own work with adult and child schizophrenics, I tend to be in the camp which prefers to build defenses and which attempts to re-educate schizophrenics to be more like other people. I believe that the expression of psychotic material must be controlled to prevent fur-

ther ego disintegration. I feel that catharsis alone has limited value and that it is often difficult to deal therapeutically with psychotic material even in the individual therapy situation and that it is still more difficult to deal with it in the group situation. The most important therapeutic force in my view is the patient-therapist relationship. I think that the therapist must give some direction to these patients to supplement their weak egos with his stronger one. I feel direction can be given in such a way as not to destroy a relationship or to prevent its being formed. These statements all reflect personal opinion, however, and the literature is well supplied with opposing opinions. To my knowledge, there are few really good scientific data to support any of the ardently held and fervently expressed convictions which are current among therapists. To support their positions, most therapists tend sooner or later to fall back on the phrase, "Well, it has been my experience . . ."

Kaplan and Bikofsky's criticism of Rousos' neglect of psychological and psychiatric literature seems especially well taken. Rousos could have buttressed her position by citing references and could have indicated more clearly that underlying her view of therapy is a conception of schizophrenia which is only one among several that are now current. Whether your journal wants to get involved in this controversy would depend on whether you feel it worthwhile to rehash an argument to which a considerable number of printed pages has already been devoted.

Jan Duker, Ph.D.
Clinical Psychologist

DELEGATES DIVISION

ARIZONA

Delegate-Reporter, Barbara K. Brown, O.T.R.

Slightly less than two years ago, Arizona was accepted for state membership in the American Occupational Therapy Association. With admiration for those responsible for achieving this status, we recall the tremendous effort necessary to accomplish state organization. In our entire state, there are approximately 30 known occupational therapists, of which eleven are in actual practice. These 30 are dispersed throughout Arizona and are not centrally located in one of the two major cities. Organization, therefore, was a gigantic task of communication and assembly.

Today these factors remain our greatest problems. One important step taken to improve our communications system and to keep our far-spread membership informed and its interest sustained has been the establishment of a state newsletter. Through this medium each therapist is kept abreast of new or expanding programs in the various occupational therapy departments, job opportunities available in Arizona, and general news items of the individual therapists, as well as notification of forthcoming meetings.

Recruitment is another area in which much effort is being expended, headed efficiently by Rosine Gualdoni, O.T.R. Information completed has included files of the schools in Phoenix and Tucson, a list of Arizona news outlets, and a printed fact sheet for recruitment. Plans are in progress for establishing a listing of the employment of occupational therapists in Arizona, including job descriptions, number of persons employed, and salaries.

OFFICERS

President	Marjorie E. Hill, O.T.R.
Vice-President	Alice C. Leach, O.T.R.
Secretary-Treasurer	Dorothy E. McCutcheon, O.T.R.
Delegate	Barbara K. Brown, O.T.R.
Alternate-Delegate	Adelaide R. Smith, O.T.R.

KANSAS

Delegate-Reporter, Ellen Roose, O.T.R.

Four meetings of the Kansas Occupational Therapy Association were held during the year 1959-1960. In order to give variety in subject matter as well as therapists attending, each meeting took place in four different locations. Speakers included people involved in missionary work, orthopedic surgery, psychology and psychiatry. Their subjects covered "India," "New Advances in Orthopedic Surgery for the Upper Extremity," "The Place of Values in Therapy" and "A Multi-Discipline Psychiatric Approach to the Treatment and Training of the Mentally Retarded."

On an individual basis, members of the Kansas Occupational Therapy Association attended meetings of allied professions such as physical therapy, speech therapy and special education. Personnel from these professions were invited to the Kansas Association meetings.

Following each meeting, a K.O.T.A. newsletter is published which contains the minutes of that meeting, current material on standing committees, placement services to the membership, a report from the delegate and other information from the national office helpful to the association's membership.

The Kansas Association again voted to provide a \$25 scholarship from funds taken from the association treasury. This is administered by the director of the School of Occupational Therapy at the University of Kansas.

The membership has been faced with the problem of keeping the Association informed of new therapists in the state. Consequently, the membership committee provided the chief occupational therapist in each hospital with forms to be used each time a therapist left or a new one was hired.

The special projects committee sent out requests (via the Newsletter) that reports be sent in on any unusual work in research in occupational therapy departments throughout the state of Kansas.

The recruitment and publicity committee has been active the past year with newsletters on occupational therapy sent from the university, "Career Days" talks given in high schools, and orientation to occupational therapy given to groups touring the University of Kansas.

In spite of the Association's accomplishments, numerous problems remain. They vary in nature, and the membership hopes to improve the situation by planning a more active program through an accelerated schedule consisting of nine meetings instead of the usual four or five. These are to be held both on Saturdays and weekday evenings with hope that a greater membership turnout will result.

OFFICERS

President	Dorothy Morris, O.T.R.
Vice-President	Joanne M. Wyrick, O.T.R.
Secretary	Joann Swanson, O.T.R.
Treasurer	Constance Petterson, O.T.R.
Delegate	Ellen S. Roose, O.T.R.
Alternate Delegate	Carl Fairman, O.T.R.

MASSACHUSETTS

Delegate-Reporter, Eileen O'Hearn, O.T.R.

The public relations committee of the Massachusetts Association for Occupational Therapy, made up of the recruitment, publicity and exhibit committees, has had

another active year under the guidance of its coordinator, Mrs. Georgia Eacker, O.T.R. Their recruitment program is built around the film, "Two Hands Are Not Enough," which was written by the recruitment committee and produced by WGBH-TV last year. The video tape has been shown for the second time on educational television and has been loaned sixty-one times. The viewers of the film, numbering over three thousand, have included high school students, occupational therapy and other college students, and graduate occupational therapists throughout a seventeen state area. The response to the film, particularly among high school students, has been favorable.

Our membership roster includes sixty active, thirty-one associate, and thirteen auxiliary members. This past year we have tried to stimulate more of our members to active participation in the association by presenting membership meetings designed to appeal to their diversified interests. The annual membership meeting, held at the Veterans Administration Hospital in West Roxbury, Mass., was particularly effective. Following dinner, a tour and the business meeting, Miss Mary Fiorentino, O.T.R., gave a presentation of the theory of the Bobath method of treatment. Miss Fiorentino is the director of occupational therapy at the Newington Hospital for Crippled Children in Newington, Connecticut. Her interesting talk was followed by a film showing the Bobath treatment techniques.

This coming year we are going to increase our efforts to provide programs that will attract a greater number of our membership.

OFFICERS

President	Patti Z. Maurer, O.T.R.
Vice-President	Joanne MacDonald, O.T.R.
Secretary	Myrna M. Evans, O.T.R.
Treasurer	Jane Welsh, O.T.R.
Delegate	Eileen O'Hearn, O.T.R.
Alternate Delegate	Marjorie Canada, O.T.R.

NORTHERN NEW ENGLAND

Delegate-Reporter, Jacquelin L. Wright, O.T.R.

The Northern New England Occupational Therapy Association, representing the states of Maine, New Hampshire and Vermont, held four meetings. The September meeting combined business and the annual rummage sale. Part of the proceeds went into a scholarship fund which also received a sizable gift of money this year in memory of a former member. The next meeting was held at the University of New Hampshire with the association being host to the students of the occupational therapy curriculum at a tea and presentation of educational films. The spring meeting included a tour of the new Child Guidance Clinic on the grounds of the New Hampshire State Hospital and the director of the clinic gave an excellent presentation of its many services. The June meeting was sponsored jointly with the Physical Therapy Association at the Mary Hitchcock Memorial Hospital in Hanover, New Hampshire, where a physician spoke to the group on "Vascular Surgery for the C.V.A."

The association, in addition to holding its rummage sale, sold tins of candy before the Christmas season.

The association exhibit was displayed at the three day conference of the New England division of the National Rehabilitation Association held at Poland Spring, Maine, in June. One of our members is also a member of a health careers panel for this area.

OFFICERS

President	Jacquelin L. Wright, O.T.R.
Vice-President	Virginia Bell, O.T.R.
Secretary	Joan Libby, O.T.R.
Treasurer	Eileen Dixey, O.T.R.
Delegate	Eleanor Kyle, O.T.R.

EASTERN PENNSYLVANIA

Delegate-Reporter, Laurence N. Peake, O.T.R.

The Eastern Pennsylvania Occupational Therapy Association has begun work toward October, 1962, when the World Federation of Occupational Therapists and the American Occupational Therapy Association will meet jointly in Philadelphia, at the Bellevue-Stratford Hotel. Miss Margaret M. Bishop has been named convener, and Mrs. Corinne White Coscia, co-chairman. This will be an outstanding, history-making conference of great interest. We sincerely hope that many of you will plan to join us in welcoming our international colleagues and visitors.

With a new public relations coordinator and a representative attending the recruitment workshop in Florida last winter, our association anticipates increased efforts in recruitment and publicity during the coming year.

Meetings have included such topics as: "New Tuberculosis and Aphasia Treatments," "Rehabilitation Services of the Visiting Nurse Society of Philadelphia," "Pre-vocational Panel" dealing with programs in our area and "Inside AOTA" with a skit and slides. In addition an excellent half-day "Orientation to Civil Defense Preparedness and Planning" with community speakers was arranged by EPOT's civil defense committee chairman, Capt. Barbara Knickerbocker, AMSC (OT), and aroused interest in further sessions next year.

OFFICERS

President	Sylvia H. Larsson, O.T.R.
Vice-President	Edith Edwards, O.T.R.
Corresponding Secretary	Mary Del Bello, O.T.R.
Treasurer	Elizabeth Murphy
Delegate	Laurence Peake, O.T.R.
Alternate Delegate	A. Elise Remont, O.T.R.

Review

PHYSICAL THERAPY FOLLOWING RADICAL MASTECTOMY. Doris I. Neel, R.P.T. *The Physical Therapy Review*, 40:5 (May) 1960.

The author describes a program in which approximately 55 patients received physical therapy following radical mastectomy. In this surgery, generally performed for malignancy of the breast, the greater part of pectoralis major and the entire pectoralis minor muscles are removed together with all of the contents of the axilla and the breast en bloc. The part of pectoralis major which has its origin on the clavicle is preserved as this is the only muscle left to produce forward motion of the arm and shoulder girdle.

Physical therapy procedures are begun prior to X-ray therapy. They consist of diaphragmatic breathing exercises to strengthen and increase motion of the abdominal muscles; passive motion for stretching, and arm raising laterally and massage over the skin flaps to loosen and mobilize the skin and subcutaneous tissue from the chest wall. Positioning with the aid of sponge rubber rolls was also found to be helpful.

Active exercises are started when indicated. These consist of abduction, forward-upward motion and external rotation of the arm. If equipment is used it consists of chest weights, dumbbells, or a wand. Eventually there should be complete mobility of the shoulder girdle, normal tone and strength in forward motion of arm, and the patient should be able to reach with her fingers down her back below the spines of the scapulae, and from upwards to the scapulae so that no part of the back is inaccessible.

—Major Maryelle Dodds, M.A., O.T.R.

CLASSIFIED ADVERTISING

Classified advertising accepted for POSITIONS WANTED and POSITIONS AVAILABLE only. Minimum ad \$4.00 for 3 lines, each additional line \$1.00. (Average 56 spaces per line.) Classified display, boxed, \$5.00 per column inch. Copy deadline first of each month previous to publication.

POSITIONS AVAILABLE

OTR—functional and diversional program directed by M.D. psychiatrist. Well-equipped 15 by 45 ft. room; 100 bed, St. Luke's Convalescent Hospital, Greenwich, Conn., 1 hr. to NYC. Live in if desired. Contact Director.

Wanted: Registered occupational therapist II (director), salary \$4,680 to \$5,824. Occupational Therapist I, salary \$3,900 to \$4,888 depending on qualifications. Relatively new department with growth possibilities. Paid vacation, sick leave, legal holidays, excellent retirement system, group life insurance. Apply: Peter W. Bowman, M.D., Supt. Pineland Hosp. & Training Center, Box C, Pownal, Maine.

Occupational therapist registered: 2 vacancies at Grasslands Hospital—one psychiatry, one geriatrics and medical services. Beginning salary \$4710 with annual merit increases to \$5290. Liberal personnel policies. Apply Personnel Office, Grasslands Hospital, LY-2-8500, Ext. 61, Valhalla, N. Y.

Staff position for registered occupational therapist or eligible graduate, rehabilitation dept. of large, modern tuberculosis hospital. Pleasant suburban location with good transportation, shopping and recreational facilities. 40 hour week, paid vacation and holidays, liberal cumulative sick leave, retirement plan. Full maintenance available at reasonable rate. Opportunities for further education in local universities. Write: Director of Rehabilitation, Sunny Acres Hospital, Cleveland 22, Ohio.

Positions open for staff therapists in progressive well-equipped OT department of largest private mental hospital (750 beds) in USA. Well-rounded program includes both workshop and ward classes. Paid annual vacation and sick leave, laundry and maintenance provided. Pleasant working conditions, beautiful surroundings. Write to Dr. J. Butler Tompkins, Superintendent, Brattleboro Retreat, Brattleboro, Vt.

Staff OT positions in new, modern, 1100 bed GM&S hospital with TB allocation, affiliated with N. Y. Medical College. Large, well equipped dept. with immediate placement in areas of physical disabilities and pulmonary disease. Seven hour day, five day week, four weeks paid vacation, eleven holidays, twelve days sick benefits, shorter summer hours. Salary \$4250 per annum. Write: Miss E. A. Palmer, O.T.R., Metropolitan Hospital, 1901 First Ave., New York 29, N.Y.

Occupational therapists—\$3,993.00 to \$6,996.00 depending on training and experience. (1) opening for 42 bed psychiatric ward; (1) vacancy for 42 bed rehabilitation floor (neurological and orthopedic disabilities, children and adults). Position of chief therapist is open. Contact Forbes Polliard, Coordinator, Curtis Hixon Rehabilitation Center, Tampa General Hospital, Tampa 6, Florida.

OCCUPATIONAL THERAPISTS for California's progressive programs in state mental hospitals and for physically handicapped children in special schools. Opportunities for imaginative and resourceful therapeutic activities. Eligibility for registration with the national registry of the American Occupational Therapy Association is required. No experience is needed to start at \$436 a month. Positions in schools under the Crippled Children Services program are open also to experienced occupational therapists at \$481 a month. Attractive employee benefits. Secure details from State Personnel Board, 801 Capitol Avenue, Sacramento 14, California.

Immediate opening for male OTR to head the activity therapy department in large state hospital. Large department with emphasis on industrial activities. Other sections within the department include occupational therapy, recreation, education, volunteer services and audiovisuals. Hospital is growing with many new buildings and programs. Liberal personnel policies. Three years experience with one year supervisory level required. Salary range from \$5400 to \$6720 per year. Write Theodore G. Denton, M.D., Superintendent, Central State Hospital, Petersburg, Virginia.

Occupational therapist, registered, for modern, 240 bed hospital in rural area. Experienced in treatment of physical disabilities. U.S. citizen. Salary range \$392.00 to \$491.00. With experience, starting salary second step (\$415.00), outstanding qualifications at third step (\$439.00). Retirement system, including social security. Write to Tulare-Kings Counties Hospital Springville, California.

Assistant chief occupational therapist—Glenn Dale Hospital, 600-bed chronic diseases and tuberculosis hospital for the District of Columbia. Immediate opening; sal. range: \$5,885 to \$6,875; U.S. civil service requirements and benefits. Write: Superintendent and Medical Director, Glenn Dale Hospital, Glenn Dale, Md.

Experienced registered occupational therapist to operate occupational therapy department for 100 bed psychiatric unit in 800 bed hospital. Salary open. Contact John R. Mote, Administrative Assistant, Methodist Hospital, 1604 North Capitol Avenue, Indianapolis 7, Indiana.

Occupational therapists: 2 openings in comprehensive out-patient rehabilitation center. Excellent program and personnel policies. Chief occupational therapist minimum of 2 years experience. Starting salary \$5700. Staff occupational therapist no experience necessary. Starting salary \$4900. Contact L. Burke Crowder, Administrator, Community Rehabilitation Clinic, 614 Dartmouth Ave., SW, Canton 10, Ohio.

Occupational Therapist I: occupational therapist position for a male at the institution for the mentally ill. Requires graduation from a school of occupational therapy approved by the Council of Medical Education and Hospitals of the American Medical Association including or supplemented by one year of supervised occupational therapy work experience in a recognized agency or institution. Salary \$403.00 per month. Apply: Mrs. Loretta Fukuda, Recruiting & Examining Supervisor, Hawaii Personnel Services, 825 Mililani St., Honolulu 13, Hawaii.

Openings now available for American registered occupational therapists in new facility serving industrially injured workers exclusively. Experienced therapists beginning salary \$380.00 per month with annual increments. Paid vacations, sick leave, five-day week, both OASI and State retirement benefits. Apply: Miss Patsy J. Brittain, O.T.R., Supervising Occupational Therapist, Department of Labor and Industries Rehabilitation Center, 32nd Avenue South and Alaska Street, Seattle 8, Washington.

Wanted: immediate opening for chief occupational therapist at 500 bed TB hospital having varied and interesting therapy program. Beautiful hospital grounds in rolling hills of western Pennsylvania near Pittsburgh and Lake Erie. Career civil service. Many fringe benefits. Contact Personnel Officer, VA Hospital, Butler, Pa.

Immediate position for staff OTR with two (2) years experience in progressive psychiatric hospital. Salary: \$4773-\$6090. Write Mrs. Haru Lemke, O.T.R., Director of Occupational Therapy, Allentown State Hospital, Allentown, Pennsylvania.

Position open for registered occupational therapist in a modern, recently expanded 200 bed general hospital located in a progressive midwestern community. Recently established department now serving eleven bed psychiatric unit. Occupational therapy program to be expanded to include general, medical and surgical patients. Salary open, commensurate with training and experience. Consultation and referrals available from local new rehabilitation center. Apply Box 100, American Journal of Occupational Therapy, 3514 N. Oakland Ave., Milwaukee 11, Wis.

Applications continually accepted for staff therapists in rehabilitation hospital treating children and adults. Addition completed recently includes complete new OT department. Current staff of five is being gradually increased to meet greater in and out patient capacity. Progressive personnel policies. Salary commensurate with experience and training. Location ideal for cultural interests and all sports. Further information and attractive brochure furnished on request. Apply to Administrator, Sunnyview Orthopaedic and Rehabilitation Center, Inc., 124 Rosa Road, Schenectady 8, New York.

Immediate placement for registered qualified occupational therapist. Extensive expansion in rehabilitation program in state psychiatric hospital offers an opportunity for imagination and resourcefulness. Excellent experience available in treatment of children and adults. Only 30-minute drive from Richmond, Virginia. Opportunity for advancement. Hospital currently being modernized by remodeling and addition of new buildings. Mr. George T. Blahor, O.T.R., Director of Department. Salary \$4128 to \$5160. Contact Personnel Supervisor, Box 271, Petersburg, Virginia.

Supervising occupational therapist to head occupational therapy department in a 500 bed teaching hospital. Applicants should have had recent supervisory and administrative experience. Pleasant working conditions. University community. Contact Personnel Office, University of Virginia, 1416 W. Main Street, Charlottesville, Virginia.

Modern, well-equipped department in state hospital near Morristown, New Jersey, 30 miles from NYC. Staff positions available at \$4,309 to \$5,599. Opportunity for professional growth. Programs include clinics and prevocational areas. Lucille Boss, O.T.R., Director. Civil service benefits. Low cost maintenance usually available. Apply Richard E. Winans, Personnel Director, New Jersey State Hospital, Greystone Park, N.J.

A progressive approach to occupational therapy as a psychiatric treatment. Openings for staff OTR'S in psychiatric department of private general hospital. New department, three units totaling 61 beds, day patients, student training. Three weeks paid vacation, sick leave, legal holidays. Apply to: Frances Rizzo, Director of Occupational Therapy, Dept. of Psychiatry, Presbyterian-St. Luke's Hospital, 1753 W. Congress Street, Chicago 12, Illinois.

Embreeville State Hospital, Embreeville, Pa.—Two OTRS needed to organize 2 units. OTR I—\$4758-\$6071, OTR II—\$5252-\$6695—15 days vacation, 13 holidays, sick time, retirement and social security. Contact May B. Sharp, OTR.

We have a position available at Children's Hospital and Rehabilitation Center as of January 1, 1961, as follows: Occupational Therapist. Must have broad concept of occupational therapy to develop program in a growing rehabilitation center working with 9 other professional personnel. Starting salary with experience, \$4500.00 to \$6000.00. Contact Dennis R. Midgorden, Children's Hospital and Rehab Center, 1501 North 18th St., Waco, Texas.

Wanted: Male or female OT's. Registered or registration eligible, for work in a large state psychiatric hospital. Excellent starting salary with many fringe benefits available. John W. Whitehouse, Personnel Director, South Carolina State Hospital, Columbia, S. C.

Wanted immediately: Assistant director and staff therapists for 300-bed private psychiatric hospital. Salaries open. Maintenance optional. Write: Mrs. Eleanor S. Owen, O.T.R. or Miss Ruth L. Smiley, O.T.R., The New York Hospital-Westchester Division, 21 Bloomingdale Road, White Plains, N. Y.

Wanted—full time OT for growing UCP of Delaware County treatment unit in Chester, Pa. Good personnel policies. Salary commensurate with training and experience (\$4000 and up). Address inquiries to G. Richard Wolfe, Clinic Director, UCP of Delaware County, 511 East 21st St., Chester, Pa.

Immediate opening for staff therapist at Koch Hospital, a 600 bed hospital for chronically ill and tubercular patients. Salary range \$4365 to \$5305 per year. Three weeks vacation, eleven paid holidays, sick leave, pension plan. For further information write Mrs. M. Wilson, Koch Hospital, St. Louis 29, Missouri, or Department of Personnel, City of St. Louis, 235 Municipal Courts Building, St. Louis 3, Missouri.

Wanted! Occupational therapist to work with physically handicapped children in a public school setting. Must meet certification requirements for State of Ohio. Salary range \$4250 to \$7150 for ten months. Apply to: Miss Sarah E. Metzger, Associate Director, Personnel, Cincinnati Public Schools, 608 E. McMillan St., Cincinnati 6, Ohio.

Staff occupational therapist for physical medicine and rehabilitation dept. of 650 bed general medical-surgical and teaching hospital. Forty-five minutes from Manhattan, near Long Island recreation areas. Salary \$4210-\$5560. Full maintenance \$32 per month, plus other benefits. Write: Dr. H. S. Whiting, Director of PM&R Dept., Meadowbrook Hospital, Box 108, Hempstead, N.Y.

Registered occupational therapist—immediate opening—well equipped (GM&S, TB and Psychiatric). Affiliated with medical school. In rapidly expanding community with large university. Starting salary—recent grad., little or no experience, \$4,345. Starting salary, experienced therapists, \$5,355. Write: Personnel Div., VA Hospital, Syracuse, New York.

Occupational therapist wanted for a 200 bed home for aged to head OT program. Department is fully equipped with generous budget for supplies and equipment. Social service and medical staff including psychiatrist works closely with OT department in a dynamic, rehabilitative setting, which also includes a fully equipped physical therapy department. Ample assistance available whenever needed. Minimum salary \$4,500.00. Liberal holiday and vacation leave and excellent retirement plan and Blue Cross available. Write Executive Director, Jewish Orthodox Home for Aged, 736 Lakeview Rd., Cleveland 8, Ohio.

Staff occupational therapist, Indiana University Medical Center, Indianapolis, Ind. Robert W. Long Hospital (adult, 272 beds). GM&S and rehabilitation program, ward and clinic services, small outpatient group. Rehabilitation program new and expanding. Participation in interdisciplinary clinics, regular responsibilities in connection with the undergraduate OT curriculum and the clinical affiliate program of the department. Salary from \$4,000 according to experience.

Staff occupational therapist—for well-organized expanding department in a progressive psychiatric hospital located within the city limits of Lexington, Kentucky. University of Kentucky and a new medical school offer many educational and cultural advantages. Will consider recent graduate. Beginning salary \$4296 with promotional possibilities to \$6048. Very liberal employee benefits. For further information contact: Mrs. Frances M. Jonakin, Occupational Therapy Consultant, Eastern State Hospital, Lexington, Kentucky.

Two vacancies exist for occupational therapists in 820 bed GM&S hospital at the Veterans Administration Center, Dayton, Ohio. Excellent rehabilitation facilities available under a board-certified physiatrist. Starting salary \$4345 or \$5355 depending on experience. Liberal leave and health benefits, quarters available. Center located in edge of industrial city of 350,000. For further information wire or write, Personnel, VA Center, Dayton, Ohio.

Registered occupational therapists wanted. 1540-bed NP hospital. Community of 8000, 35 miles from Des Moines, Iowa. Career civil service positions. Liberal employee benefits. Salary \$4345 or \$5355 depending upon experience. Write Personnel Director, VA Hospital, Knoxville, Iowa.

Male or female staff registered occupational therapist in hospital-school for educable severely physically handicapped children. Broad emphasis includes physical, social and emotional aspects. For information, write Virginia Reeves, Illinois Children's Hospital-School, 2551 N. Clark St., Chicago 14, Ill.

Immediate opening for occupational therapist in a community rehabilitation center offering comprehensive services. Desirable salary and working conditions. Contact Robert A. Silvanik, Administrator, Rehabilitation Center of Summit County, Inc., 326 Locust Street, Akron 3, Ohio.

Opening January first for instructor in newly established curriculum in occupational therapy. Therapist interested in teaching various aspects of the program related to physical disabilities. Opportunities for clinical research. Salary up to \$6000 depending upon qualifications. Preference given to candidates with master's degree. Contact Alice C. Jantzen, O.T.R., J. Hillis Miller Health Center, University of Florida, Gainesville, Florida.

Staff therapist with 1 to 2 years experience needed in a new institute providing comprehensive services. It is part of the preventive medicine department of Washington University School of Medicine and emphasis is placed on teaching and research as well as service to patients. The OT program includes physical restoration, self-care, home-making, and work evaluations. One month vacation, 38 hours, 5½ day week, Blue Cross—\$350 for newly registered therapists; increments for experience. Write Miss Suzanne Schutzel, O.T.R., Irene W. Johnson Institute of Rehabilitation, 509 S. Euclid, St. Louis, Mo.

Opening for occupational therapist—full time—accredited private psychiatric hospital—70 bed. Located in Westport, Connecticut. (One hour from New York by train or car.) Write or call Hall-Brooke Hospital, Box 31, Greens Farms, Westport, Conn.

Occupational therapist registered, for cerebral palsy training center. Salary dependent upon experience. Minimum salary, \$4455.00 per year. School hours, Christmas and Easter holidays, six weeks summer vacation. Write Norfolk Cerebral Palsy Training Center, 430 Carolina Avenue, Norfolk 8, Virginia, for further details.

Staff position for registered occupational therapist. Treatment training center for children aged 5 to 12 years. Latest techniques. Excellent medical supervision. Liberal vacation, holidays, good fringe benefits. Salary range—\$4140 to \$4680. Contact: Miss Robertine St. James, Superintendent, Moody State School for Cerebral Palsied Children, Box 420, Galveston, Texas.

Wanted: staff occupational therapist, female, for rehabilitation center in teaching hospital. Salary, \$350.00 per month. Write Harold N. Neu, M.D., Medical Director, Rehabilitation Center, Creighton Memorial St. Joseph's Hospital, Omaha, Nebraska.

Occupational therapists: \$4590-\$5273 annually (depending on experience & qualifications). Vacancies at Milw. Co. Insts., Wauwatosa, suburb of Milw. 40-hr. work wk. Accred. degree in OT; elig. for regist. by Amer. O.T. Assn.; sound annuity, pension & soc. sec. benefits; liberal holiday, vacation & sick allow. Apply: Milwaukee County Civil Service Commission, Room 206, Courthouse, Milwaukee 3, Wis.

Psychiatrically trained occupational therapists for metropolitan area hospital located on the university campus. Salary based on experience, minimum, \$4,400.00. Excellent personnel policies including retirement plan and tuition allowance at university. Apply, Miss Dorothy J. Wirt, O.T.R., Chief, Occupational Therapy Department, University of Pittsburgh, Western Psychiatric Institute and Clinic, 3811 O'Hara Street, Pittsburgh 13, Pennsylvania.

Immediate opening. Chief of adult unit dealing in physical disabilities. Also desirable to have knowledge of pre-vocational testing. Newly equipped department in expanding rehabilitation center. Clinical training center, affording teaching opportunities, program directed by physiatrist. Salary open. Excellent working conditions. Contact Robert F. Scott, Executive Director, Ft. Worth Society for Crippled Children and Adults, Inc., 4700 South Riverside Drive, Fort Worth, Texas.

OCCUPATIONAL THERAPISTS
If interested in LOCATION; Maryland
SALARY: O.T. \$4,540.00-\$5,677.00
FIELD: Rehabilitation
Write to: Dr. F. L. Mahoney
Director of Rehabilitation Medicine
Montebello State Hospital
2201 Argonne Drive
Baltimore 18, Md.

ROYAL VICTORIA HOSPITAL Applications are invited for the position of **ASSISTANT OCCUPATIONAL THERAPIST**

at the

ALLAN MEMORIAL INSTITUTE

This is interesting and stimulating work in the Psychiatric Division in a setting where there is considerable teaching and research as well as clinical work available. There is a staff of five persons in this department. For detailed information and application forms, write to:

Dr. T. J. Boag, Assistant to the Director
Allan Memorial Institute,
Royal Victoria Hospital,
1025 Pine Avenue, West, Montreal 2 P.Q.
CANADA

Position for staff occupational therapist available immediately in a university affiliated rehabilitation center. Program includes functional therapy, ADL's and diversional activities. Twelve days vacation and sick leave annually. Salary open and dependent on experience. Contact Marion F. Labusohr, Chief Occupational Therapist, Occupational Therapy Section, Nebraska University-Douglas County Rehabilitation Center, Douglas County Hospital, 4102 Woolworth Avenue, Omaha 5, Nebraska.

Director—expanding occupational therapy department. Children and adults. Supervision of OT staff and students. Carry out development program. Full information on request. Write: Director, Crotched Mountain Rehabilitation Center, Greenfield, New Hampshire.

Opportunity for occupational therapist to work with retarded children up to 18 in a friendly community. Salary open. Reply in writing giving qualifications and experience. Doty House of Middletown, Inc., P.O. Box 182, Middletown, Ohio.

Immediate opening for one occupational therapy supervisor, adult unit, and two female staff therapists for recreation on adult and adolescent services of progressive psychiatric center associated with University of Michigan Medical School. Four units of intensive treatment of children, adolescents and adults with occupational therapy supervisors on each unit. Student affiliation center. Generous personnel benefits; salary commensurate with experience. Address communications to personnel department, University of Michigan Medical Center, Ann Arbor, Michigan.

Are you interested in a position as rehabilitation therapy supervisor in a four-hundred bed tuberculosis hospital, with a predominant adult treatment load? Program is well established with a well trained and energetic staff of technicians and staff therapists. Receives medical support and recognition. Coordinated program established with vocational rehabilitation. Excellent opportunity for expansion of present services. Anxious to have position filled with experienced registered OT. Send resume of training and experience to Personnel, McKnight State Tuberculosis Hospital, Sanatorium, Texas.

STATE O T CONSULTANT—Under medical direction, to assist in the development of state-wide rehabilitation demonstration programs emphasizing good team care of elderly, handicapped people. Demonstration projects, probably of one or two years duration, will show what can be done for selected group of patients. OTR and 4 years relevant professional experience. Start at \$565. R. J. Sieson, Personnel Officer, State Board of Health, Madison 2, Wis.

Challenging position available for experienced psychiatric OTR. Opportunity to establish and develop activity therapy program on newly opened treatment unit directed by one of the five medical schools affiliating with this institute. Unlimited educational and research possibilities. Salary range \$445/month to \$565/month, depending upon experience. Write: Mrs. Carolyn Owen, Activity Program Supervisor, Illinois State Psychiatric Institute, 1601 West Taylor Street, Chicago 12, Illinois.

Immediate opening for director of OT at a salary of \$4884-6540. Staff OT position at a salary of \$4020-5376. 3200-bed intensive treatment, training, and research psychiatric hospital with inter-disciplinary treatment programs. Student affiliation. State merit system, periodic merit salary increments, 40 hour week, 11 paid holidays, 15 days of annual paid vacation, 15 days of annual paid sick leave, retirement plan, room and board available. Send resume to Personnel Department, St. Louis State Hospital, 5400 Arsenal Street, St. Louis 39, Mo.

Do O.T.'s exist? This hospital has unusual advantages to offer members of this vanishing species—a liberal, OT-minded administration; modern occupational therapy building, fully equipped; up-to-date living quarters, complete maintenance \$316 per year; large student training program; wide range of craft supplies and activities; a growing program that is outgrowing the present staff; salary—beginning salary based on experience; yearly increment; paid vacations, holidays and sick time; 40-hour week; health insurance and retirement plans, plus social security; state psychiatric, 3000-bed, 50% open-door, average patient stay—3 months, accredited by AMA. Are you interested? Contact Mrs. Virginia Holmberg, O.T.R., Connecticut State Hospital, Middletown, Connecticut.

Occupational therapist, \$4740-\$5790, liberal benefits. Comprehensive rehabilitation, 200 patients, all ages. 17 occupational therapists. Large teaching program. Beautiful location 30 miles from New York City. Full maintenance available for single person at \$500 per year. Morton Hoberman, M.D., Psychiatrist, New York State Rehabilitation Hospital, West Haverstraw, New York.

Opening for an occupational therapist in the psychosomatic and psychiatric institute for research and training of Michael Reese Hospital and Medical Center. The position offers many opportunities for research and consultation. For information write Personnel, Michael Reese Hospital, 29th St. & South Ellis Avenue, Chicago, Illinois.

Immediate opening for director of occupational therapy and staff therapist in 3,000 bed state mental hospital. Salary range—director, \$6600-\$8220; staff therapist, \$4680-\$6960. For further information, write to the Personnel Director, Central State Hospital, Norman, Oklahoma.

Wanted—registered occupational therapist for 260 bed general hospital unit as of January, 1961. Salary commensurate with experience and training. Liberal employee benefits. Apply: Dr. E. C. Welsh, M.D., Psychiatrist, Columbia Hospital, 3321 N. Maryland Avenue, Milwaukee, Wisconsin.

Help wanted female: OTR to head department in large private psychiatric hospital, 35 miles from New York City. Attractive salary. 5 day week. 4 weeks vacation. 7 holidays. Many fringe benefits. Write Box 15, American Journal of Occupational Therapy, 3514 N. Oakland Ave., Milwaukee 11, Wis.

Staff therapist in private 200 bed psychiatric hospital 23 miles north of New York City. Expanding program in newly opened building. Rural setting. Starting salary \$4400. Maintenance available if desired. Three week vacation first year, four weeks thereafter. Contact Harriet Lavoie, O.T.R., St. Vincent's Hospital, Harrison, N. Y.

CLEVELAND—AKRON—New State supported short term intensive treatment children's psychiatric hospital to open early 1961. In-patient capacity—92. Day-hospital capacity—50. Six individual occupational therapy rooms. Six occupational therapy positions including one supervisor. Salary range for occupational therapists, \$400 to \$480. Hospital program includes: child care; individual or group psychotherapy; educational, occupational, and recreational therapy. State employment offers 40 hour week, 2 weeks' vacation, 15 days annual sick leave, 10½ paid holidays, retirement plan, etc. Write to: Superintendent, Sagamore Hills Children's Psychiatric Hospital; 11910 Dunham Road; Northfield, Ohio.

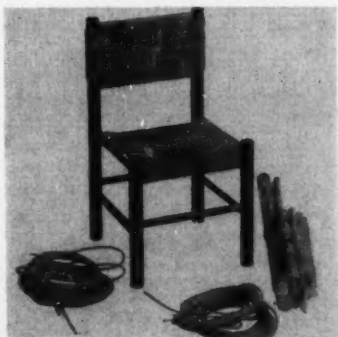
THERAPISTS
here is your
best friend for
treatment of
fractures, spastic
cases, cerebral
palsy, stroke,
polio or hand
injuries. Get it
at your surgical dealer or
as a "trial order" send
\$2.00 for one \$2.85 jar.



GENERAL
ELECTRIC CO.

**BOUNCING
PUTTY**

S. R. GITTENS, Distributor
1620 Colowhill St., Phila. 30, Pa.



RECOMMENDED FOR COORDINATION OF THE MIND AND THE HANDS

(the beginning of rehabilitation)

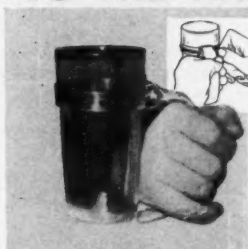
Whether for physical or psychological therapeutic goals this project offers the Therapist an excellent means and opportunity to lead the patient to recovery.

The chair comes to you unassembled, with complete directions enclosed. When completed it measures 12" tall as shown. Trial order \$2.50—10 complete units \$22.50 plus postage.

S. C. STOCKTON

1826 South Dupre Street - New Orleans 25, Louisiana

INDISPENSIBLE AIDS TO THE HANDICAPPED



NEW, IMPROVED SURE-GRIP GLASS HOLDER

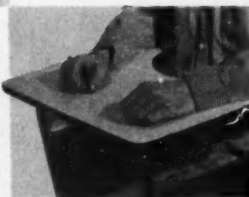
For those who lack grasp . . . now, rubber-lined stainless steel ring adjusts easily to grip any size glass. Pliable plastic coated metal handle bends to fit any hand! Washable even by machine. \$2.00

plus 25¢ Shipping & Handling

WHEELCHAIR LAP BOARD

Room for work or play on the 18" x 24" Formica top. Fits all sizes and shapes of chair arm rests, adjusts to desired distance from body. Heavy rubber fasteners hold securely to chair, rubber undersurfaces prevent scratching, insure stability. \$10.00

plus 75¢ Shipping & Handling



Write for the FASCOLE CATALOG — most complete listing in the field

FROM FASCOLE CORP

Dept. 1120, 257 Park Ave. South, New York 10, N.Y.

BLUEPRINTS of LEATHER

NEW!

Amazing new Book of detailed Instructions HOW TO

MAKE 16 different items of leather and wood: Serving Tray, Waste Basket Cover, Book Ends, TV Bench, Coffee Table, Carrying Case etc.

When ordered with FREE 112 page Catalog, you get "BLUEPRINTS TO LEATHER"

FOR ONLY **25c**

TANDY LEATHER CO.

P. O. BOX 791-GG

FORT WORTH, TEXAS



FREE!

112 PAGE CATALOG

SINCE 1919



*A Major Advance
in Rehabilitation Machines!*

The New "Oliver" MARK II

For use with arm and leg injuries or disabilities. Two separate units . . . adjustable seat and work table with foot pedals to operate tools for sawing, drilling, grinding, sanding, polishing wood, metal, or plastic.

- Unusual sense of security
- Unusual degree and number of adjustments
- Unusual versatility
- Unusual ruggedness of design

Send for Name of Nearest User.

Write for details and prices

"Our 50th Year in Business"

SAX ARTS & CRAFTS

(EXCLUSIVE DISTRIBUTORS)

1101 N. 3rd St.

Milwaukee 3, Wis.

Have You Tried?

Sax-Crafts, Division of Sax Brothers, Inc., Milwaukee, Wisconsin, has been appointed sole North American distributor of the English-made "Oliver" Rehabilitation Machine. The present equipment (Mark II) is an improved version of the original machine which met with immediate success among occupational therapists when it was first brought out in 1958.

The Oliver Rehabilitation Machine is designed for use with arm or leg injuries or disabilities. It consists of two sections, a work table with pedal unit and a seat cradle. The table is equipped with adaptor heads for sawing, drilling, sanding and polishing wood, metal and plastics. The work unit is equipped with adjustable pedals by which the patient furnishes power for operating the equipment. Seat height is adjustable, as is the pedal length. The seat unit, which is equipped with all-direction casters, may be used separately as a walker or standing frame, as a bench seat, or as a wheelchair from one area to the next and is equipped with wheel locks.

The newly designed Oliver Rehabilitation Machine is adjustable and versatile. Its construction has been de-



signed to impart a high feeling of security and stability to both patient and therapist. The machine is easy to maintain and is ruggedly designed by an occupational therapist for use by occupational therapists.

For detailed information and descriptive literature, write to the distributor, Sax-Crafts, Division of Sax Brothers, Inc., 1101 North Third Street, Milwaukee 3, Wisconsin.



A small, lightweight study stand is available from Joan Toggitt, 52 Vanderbilt Ave., Room 1410, New York 17, N. Y. It is made of aluminum, has non-slip tips in white, and folds flat for easy storage. Its inexpensive price of \$1.00 makes this an ideal addition to all occupational therapy departments. It also makes a perfect "stocking gift" at Christmas time for friends who like to read while eating.

A group of newly designed eating utensils, answers the demand for an adult-sized set which allows many patients with limited hand or arm function to feed themselves. The swivel action of the bowls on long-wearing nylon bearings, keeps them level even when the users wrist or arm is unsteady. This prevents spilling of foods and brings new confidence in eating.

The specially designed grip on the (4 1/2") plastic handles is also a boon to those with limited hand function. It can be held in either right or left hand with relative ease. The utensils

wash as other flatware, even in commercial dishwashers. Three pieces are available: a teaspoon at \$2.00, soup spoon at \$2.50, and spork (combination spoon and fork) at \$3.00 or the 3-piece set at \$7.20 from Fascole Corporation, 257 Park Avenue South, N.Y.C.

For the first time, self-hardening Mexican Pottery Clay is available in moist as well as dry form. In addition, the formula has been improved to make modeling easier and results better. Completely dry objects are a



beautiful, deep red color, very hard and durable. Plastic bag packing within the box keeps the clay in excellent condition, and the plastic bag is convenient for storing left over clay and unfinished pieces. A folder of ideas with prices is available on request. Write American Art Clay Company, 4717 West 16th St., Indianapolis 24, Indiana.

AMERICA'S LARGEST SELECTION OF SUPPLIES FOR COPPER ENAMELING & JEWELRY

Ceramics • Mosaics • Aluminum
Free instruction and project sheets
sent with free 136 page catalog.

BERGEN ARTS & CRAFTS, INC.
300 S.W. 17th Ave., Miami, Fla.

LEATHERCRAFT!

FREE Catalog for O.T.'s
Page after page of exciting
kits, projects, tools, patterns,
etc. From the

"House of Leather"
MACPHERSON LEATHER CO.
140 So. Main St.
Los Angeles 12, Calif.

1960 CATALOGS

Complete Line of
Ceramic Equipment,
Copper Enameling,
and Mosaics
FREE From Dept. N.

SEELEY'S CERAMIC SERVICE
7-9 River St., Oneonta, N.Y.

Nelly Bee

Weaving Loops
and Looms

NELLY BEE PRODUCTS
Box 2393 Hickory, N. C.

HAND KNITTING YARN of all kinds

Write for descriptive list
and prices

ILLINOIS YARN COMPANY, INC.
BOX 86 ROCHELLE, ILLINOIS

Send for **FREE ARTS & CRAFTS
160 page CATALOG**
LEATHERCRAFT TO CERAMICS
"The Encyclopedia of Creative Arts
Materials"

Art Supplies, Mosaics, Copper Enamel-
ing, Wood Fibre, Basketry, Plastics,
Felt, Jewellerycraft, Shellcraft.
ARTS & CRAFTS DISTRIBUTORS, INC.
9520 Baltimore Ave. College Park, Md.

SAW ACCIDENTS?

Now! Dangerous circular table saw
injuries eliminated by new amazing
visual Brett-Guard patented SEE-
THRU safety tool! Fits all rip saws.
Installs easily! Features TRANSPAR-
ENT PLEXIGLAS SHIELD. Covers saw
blade yet allows FULL VISION & com-
plete accuracy. Send for FREE FOLD-
ER today! Free Loan Movie Available
BRETT-GUARD CORP. Lowell 8-2600
ENGLEWOOD, NEW JERSEY



**PROFITABLE
RUG WEAVING**
Men-Women — make
good profits year
around! Easy, fast, fas-
cinating! Send for
FREE Catalog, low
money saving prices on
looms, all materials
and supplies!

OR. RUG CO., Dept. 0022, Lima, Ohio

Georgia Warm Springs Foundation

GRADUATE COURSE

**Physical Therapy and Occupational Therapy
In the Care of *Neuro-Muscular Disease***

This course is open to graduates of approved schools of physical and occupational therapy. Such graduates must be members of the American Physical Therapy Association and/or American Registry of Physical Therapists, or American Occupational Therapy Association.

Entrance dates: First Monday in January, April and October.

Course I—Emphasis on care of convalescent neuro-muscular disease with intensive training in functional anatomy, muscle testing, muscle reeducation and use of supportive and assistive apparatus. This course is complete in itself.

Course II—Three months duration with course I prerequisite. Emphasis on care of severe chronic physical handicaps with intensive training in resumption of functional activity and use of adaptive apparatus.

In-Service Training Program—Fifteen months duration at salary of \$225 per month plus full maintenance, increasing to \$250 per month at the completion of nine months. This program includes training in course I and II.

Tuition: None. Maintenance is \$100 per month. For scholarship to cover transportation and maintenance for course I and II, contact The National Foundation, 800 2nd Avenue, New York 17, N. Y. (Scholarships require two years of experience.)

For further information contact:

ROBERT L. BENNETT, M.D.
Medical Director

Georgia Warm Springs Foundation
WARM SPRINGS, GEORGIA

Something New and Different In Tooling Leather!

**Tooling cowhide with a calf-like finish . . .
at ONE-HALF the cost of real tooling calf!**

Due to a special tannery process, this tooling cowhide so resembles real tooling calf that it is hard to tell the two apart. Yet this new stock sells for about **half the price** of regular calf.

This special leather tools readily and nicely. Comes in two weights—2½ oz. for wallet backs, or whatever you want to tool . . . and 1½ oz. for billfold pockets, pocket secretary linings, etc. In black or medium brown.

FREE SAMPLE

See for yourself! At no cost or obligation, we will rush a sample billfold back to you. As you experiment, the versatility and quality of this money-saving leather will surprise you. Write today!

Write for new **FREE** Handcrafts catalogs,
including latest low price lists.

J. C. LARSON CO., INC.

Dept. 9911

820 S. Tripp

Chicago 24, Ill.

HANDWEAVING—an ideal craft for therapy and fun

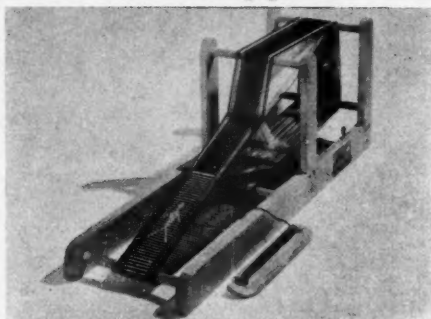


Lily 14 INCH HAND LOOM KIT

Weaving is a fascinating craft for all ages and with Lily's Hand Loom Kit, containing the NEW 14 INCH LOOM, anyone can start weaving immediately—previous weaving experience is not necessary as easy-to-follow, illustrated instructions are included in the kit—The loom is warped with yarn for an attractive luncheon set and one of the place mats is started. The kit also contains weaving shuttles, yarn for luncheon set, reed hook, warping pegs, packing strips and a complete set of yarn samples.

\$25.00
Postpaid
Complete

A free descriptive brochure upon request.



Lily INKLE LOOM

Lily's Inkle Loom is just the thing for bed patients—lightweight and easy to handle. Inexpensive, too, only \$7.50 for loom, shuttle, 75 tied heddles and instruction book containing a variety of designs—multi-colored belts, garters, trims, drawstrings, braids and galluses. Order several today.

\$7.50
Postpaid
Complete

A complete stock of weaving yarns, looms and supplies ready for shipment in quantities to suit your needs. Send for FREE catalog and price list.

Handweaver's Headquarters • LILY MILLS COMPANY • Dept. HWN • Shelby, N.C.

PRESTON

EQUIPMENT FOR



● **O. T. EQUIPMENT:**

Herald, Nadeau, Lilly and Inkle Looms; Ceramic Kilns; Potters' Wheels; Moto-Shop Power Tool, Sander, Dust Collectors; Work Benches; ADL Training Boards.

● **CEREBRAL PALSY EQUIPMENT:**

Relaxation Chairs; Kindergarten Chairs & Cots; Cut-Out Tables; Stand-In Tables; Standing Stabilizers; Straight and Reciprocal Skis; Crawler; Protective Helmets; Tricycles with Body Support.

● **SPEECH THERAPY:**

Audiometers; Tape Recorders; Auditory Training Units; Chromovox; Mirrors.

● **AIDS FOR THE HANDICAPPED:**

Wheelchairs; Commodes; Walkers; Tilt Tables; Standing Beds; Crutches and Canes, including Tripod and Four-Legged Canes.

● **SELFHELP DEVICES:**

Devices for one-armed knitting, embroidery and darning; Automatic Page Turners; Eating & Drinking Aids; Dressing Aids; Reachers; Bathtub Rails and Seats; Toilet Armrests; Stainless Steel Grab Bars; Raised Toilet Seats; Incontinent Devices.

● **REHABILITATION EXERCISE:**

Finger & Hand Exercisers; Walking Bars and Exercise Staircases; Posture Mirrors; Gym Mats; Bicycle Exercisers; Restorator; Quadriceps Boots; N-K Table; Guthrie-Smith Suspension; Shoulder Wheels.

Complete Line of Bunnell Hand & Finger Splints; Keystone Splints; Cervical and Pelvic Traction; Goniometers; Spirometers; Stopwatches; Treatment Tables; Timers; Whirlpools; Ultrasound; Hydrocollator.

Write on your letterhead for Your Free Copy of Illustrated Preston Catalog No. 1065-0

J. A. PRESTON CORPORATION

175 FIFTH AVENUE, NEW YORK 10, N. Y. ORegon 4-9044

MOSAICS

...with Self-hardening
MEXICAN POTTERY CLAY

Quick, Inexpensive

Completely Original

No Firing Necessary

● Roll out a slab of Mexican Pottery Clay (available in dry or moist form) to even 1/4" thickness.

● Cut clay into irregular mosaic shapes.

● Impress or incise designs in some of the pieces while the clay is moist.

● Allow clay to dry thoroughly.

● Paint some shapes with Amaco Showcard Colors. Leave others in the natural, rich red color of the clay.

● With plastic squeeze bottle, trail natural or tinted Amaco Gesso onto some shapes for relief decoration.

● Glue clay shapes 1/8" apart on heavy cardboard, masonite or plywood.

● Trail Amaco Gesso in all 1/8" crevices.

● Add wood frame if desired and hang.

● Write for folder of ideas with prices on self-hardening clays. Order from your local dealer.

AMACO

AMERICAN ART CLAY COMPANY
INDIANAPOLIS 24, INDIANA



Leaders With the Newest

Offering brand new materials and projects for your O.T. Program.

Whether your emphasis is on functional, diversional, educational, money earning, or a combination—we have the materials!

For thirty years we have specialized in supplies for psychiatric, tuberculosis, geriatric, orthopedic, and handicapped programs. Our valuable experience over these years is available to you to advise new departments or old ones.

Our new ARTS & CRAFTS Catalogue shows materials in fifteen different Arts & Crafts categories. Do you have a copy? It is free for the asking.

S & S Arts & Crafts

Division of the S&S Leather Co.
COLCHESTER, CONN.

**Better
lumber
gives
better
results**

WE SPECIALIZE IN... SHOP LUMBER

Choose from 16 species
of texture-selected, kiln-dried
Appalachian Hardwoods.

WRITE FOR NEW CATALOG
FREE To Occupational
Therapists

HARDWOOD CORPORATION OF AMERICA

EDUCATIONAL LUMBER DIVISION
P. O. Drawer 1091, ASHEVILLE, N. C.

LEADING SPECIALISTS RECOMMEND

Thera-Plast®

The ideal, specially processed silicone rubber putty exercising agent for illnesses and injuries to bones, muscles, tendons and nerves.



STRENGTHENS:

- Fingers
- Hands
- Wrists
- Forearms



Full 2 oz. tin.
At your surgical
dealer. **\$2.50**

For literature write:
THERA-PLAST CO.
154 Nassau St., New York 38, N. Y.

CERAMICS-ART

Combine both! Use

The world's finest **TILES** for decorating

Superb English Tiles, Bisque or Glazed

Also Available

- Trivets, Black Iron
- Tile Hangers
- or Brass
- Book Ends
- Frames, Wood or Metal
- Lamps
- Tile backs, Cork or Felt
- Etc.

Write for **FREE** Descriptive
Price List No. OT

SORIANO CERAMICS, INC.
Long Island City 5, N. Y.



NEW wholesale
craft catalogue
Largest selection - Best prices

COMPLETE MATERIALS AND IDEAS FOR

- Jewelry Making
- Metal Tooling
- Shellcraft with
- Latest Designs
- Holiday Handcrafts
- Boutique Craft
- Fashion Trimming
- Artificial Flowers
- Leather Craft
- Chenille Craft

Send for our **FREE** 1961 Catalogue
Dept. 16

Shelart Studios P.O. Drawer
11178
St. Petersburg,
Florida

**YOUR MOST DEPENDABLE
SOURCE FOR
OCCUPATIONAL THERAPY
WOOD AND METAL SHOP SUPPLIES**

Write today for our latest catalog and prices

PATTERSON BROTHERS

15 PARK ROW NEW YORK, N. Y.
YOUR MOST DEPENDABLE SOURCE SINCE 1948



OF CRAFT SUPPLIES

A complete line of supplies for enameling, ceramics, and other crafts. Order from one source for fast shipment and low price. Over 200 enamel colors listed, more than 50 jewelry items, an outstanding selection of copper trays, bowls, and free form pieces.

THOMAS C. THOMPSON CO.
Dept. OT 1539 DEERFIELD ROAD
HIGHLAND PARK, ILLINOIS

Send for Your Free Copy!

- Enamel powders
- Spraying equipment
- Hotpack kilns
- Enameled tiles
- Jewelry kits
- Metal shapes
- Tools and accessories
- Liquid enamels
- Firing tools

FREE

**ENAMEL on COPPER
AND
CREATIVE CRAFT IDEAS**

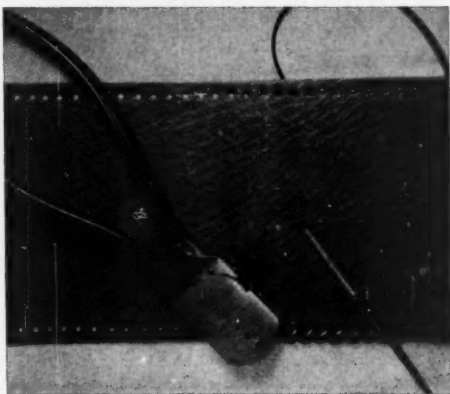


*From America's
Largest Direct Source...*

Only Immberman's (mfr. of kilns, tools and supplies widely endorsed by schools, institutions and recreation programs) offers you such a completely satisfying, direct channel to supplies and "Here's How" information! Explore enameling, mosaics, metal tooling, etching, jewelry, marquetry, etc., etc. Send for these valuable reference volumes today.

IMMERMAN & SONS

Dept. CH-29 • 1924 EUCLID • Cleveland 15, Ohio



ENJOY YOUR LACING

Use SLIM TIPS and be happy while saving money.
Positive grip will not slide off lace . . . even plastic.
Perfect size for round holes or slits.
Faster and easier to put on any kind of lace
Disposable . . . 160 for 25¢
GOLKA Tipping Pliers, \$2.50 with free pkg. tips.

Get our catalog showing 100 LeatherCraft items.

ROBERT J. GOLKA CO.
400 WARREN AVE., BROCKTON, MASS.

*Do You Have Trouble
Finding*

**BUCKLES • STEELS • ELASTIC
NON-ELASTIC • LACING • FOAM**

AND NOW

®
**VELCRO — THE NEWEST
CONCEPT IN FASTENING**

If So, Write to:

L. LAUFER & CO.
50 W. 29th St.
New York 1, N. Y.

Specialists to the Needs of the O.T. Department

FREE

**OCCUPATIONAL THERAPY
NO. 590 CATALOG**

Sent To You On Request!

Lists and illustrates, describes and prices all the tools, equipment and supplies you need.

LOOMS Hand or Foot Power

FINE WEAVING MATERIALS Rug roving, Cotton Yarn Carpet Warp, Rug Yarns

BASKETRY MATERIALS Reed, Raffia, Cane Wooden Bases and Trays, Corkcraft, Plastics

ART MATERIALS Leather and Tools, Books of Instruction

WRITE FOR FREE CATALOG TODAY

J. L. HAMMETT CO.

Educational Materials Since 1863
306 Main Street Cambridge, Mass.

*Write for this
Valuable Tool!*

Send for free copy

**"ALL CRAFTS
CATALOG"**



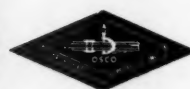
160 Big pages, thousands of items in dozens of crafts! REASONABLE PRICES and COMPLETE, PROMPT SERVICE. Since 1910.

LEATHERCRAFT • ENAMELING
WOODENWARE • ART SUPPLIES • CERAMICS
MOSAIC TILE • ETC.

SAX CRAFTS

(DIVISION OF SAX BROS., INC.)

Dept. OT, 1101 N. 3rd St., Milwaukee, Wis.



PINCH GAUGE

Muscle checks made easy. Read prehension directly in lbs. Aluminum body with anodized finish. Precision built and calibrated in one lb. intervals. Dial range zero to 60 lbs.

Price\$45.00



BALL BEARING FEEDERS

Supports arm against gravity. Rotates on ball bearings. Allows residual head, neck, or trunk motion to be transferred into functional arm motion. Adjustable stops limit proximal & distal arm motion. Clamp to any upright wheel chair.

Price\$25.00

Quality Products and Prompt Service

Free Catalog Upon Request

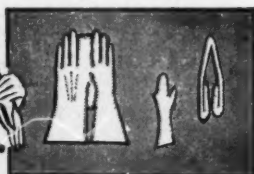
Orthopaedic Supplies Co., Inc.

9126 E. Firestone Blvd.
Downey, Calif.

Tailored Gloves

TO ASSEMBLE AND SEW

A Craft Activity That's
Beautiful and Beneficial



Glove Kits for Men and Women — choice of fine leathers — full size and color range.

Our Glove Kit provides fascinating, relaxing and rewarding occupation with leather, long recognized for its therapeutic value.

Each kit contains one pair of table-cut gloves, special needle and thread — and simple, easy-to-follow instructions. Made of the finest imported leather available, Tailored Gloves will give you lasting wear and the satisfaction which comes from making them yourself.

Write TODAY for descriptive folder and prices.

TAILORED GLOVES, INC.

GLOVERSVILLE, NEW YORK

COLORFUL! VERSATILE!

Therapeutic

FELT

Easy-to-handle FELT—the traditionally modern fabric—perfect for every use.

FELTCRAFT stimulates the imagination. FELTCRAFT creates incentive. FELTCRAFT makes an ideal therapeutic program.

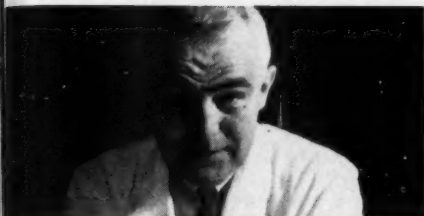
Send today for a FREE instruction book, wholesale price list and color cards. (Quality Felt by Commonwealth comes in a rainbow of 64 bright colors.) IMPORTANT—you save money when you buy by mail!

COMMONWEALTH FELT CO.

Dept. AT, 76 Summer St., Boston, Mass.

cancer! where can you turn?

A MOTHER wants to know how to guard herself against cancer of the cervix. She turns to her physician and to the American Cancer Society for the answers to her questions.



A PHYSICIAN must keep up with the fast developing facts in cancer control. He turns to his journals and the American Cancer Society professional publications and films for this information.

A BUSINESSMAN wants to protect his employees. He turns to the American Cancer Society for life-saving pamphlets, films, danger signal posters, and speakers.



A SCIENTIST needs funds to support his research on leukemia. He turns to the American Cancer Society which invests millions annually in cancer research.

A CANCER PATIENT needs dressings and weekly transportation to a treatment center. She turns to the American Cancer Society, and is helped.



The American Cancer Society is many things to many people—and is made up of many people—two million volunteer physicians, businessmen, union leaders, nurses, scientists, housewives, dedicated to one goal: saving lives from cancer. Through the Society's nationwide research, education and service programs, they hold out a lifeline to everyone threatened by cancer.

You, too, can turn to the Society. Call your local Unit for more information on what it can do for you—and, incidentally, what you can do for it.

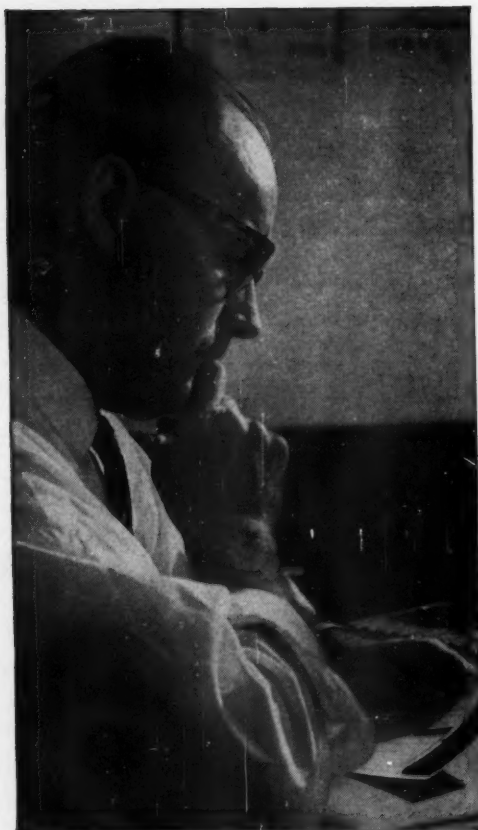
CANCER'S SEVEN DANGER SIGNALS

1. Unusual bleeding or discharge.
2. A lump or thickening in the breast or elsewhere.
3. A sore that does not heal.
4. Change in bowel or bladder habits.
5. Hoarseness or cough.
6. Indigestion or difficulty in swallowing.
7. Change in a wart or mole.

If your signal lasts longer than two weeks, go to your doctor to learn if it means cancer.

AMERICAN CANCER SOCIETY





IF YOU DON'T SEE IT, YOU WON'T SPEND IT. Millions of people sign up with the Payroll Savings Plan at work because it helps them save money that otherwise might slip through their fingers.

EVERY Savings Bond you own—old or new—earns $\frac{1}{2}\%$ more than ever before, when held to maturity.

**You save more than money
with U.S. Savings Bonds**



The U.S. Government does not pay for this advertising. The Treasury Department thanks The Advertising Council and this magazine for their patriotic donation.

How to Save Money *in spite of yourself*

Many Americans have discovered a way to save money without really changing their spending habits. You simply ask the company where you work to set aside money every payday for U.S. Savings Bonds. The Payroll Savings Plan makes sure that it goes into savings before you can dribble it away. And, if you buy a \$25.00 Bond a month (cost \$18.75) in 40 months you'll have Bonds worth \$1,000 at maturity. You really won't miss it because it adds up to only 63¢ a day.

U.S. Savings Bonds are more than a good way to save

- You can save automatically with the Payroll Savings Plan.
- You now earn $3\frac{3}{4}\%$ interest to maturity.
- You invest without risk under a U.S. Government guarantee.
- Your money can't be lost or stolen.
- You can get your money, with interest, anytime you want it.
- You save more than money—you help your Government pay for peace.
- You can buy Bonds where you work or bank.



WILL THEY LIVE IN A PEACEFUL WORLD? Lots of Americans do more than "hope so." They're buying U.S. Savings Bonds to help pay for the strength America needs to help keep the world at peace.

Colleges and Universities Offering Courses in Occupational Therapy

- Buffalo, University of, School of Medicine, 3435 Main St., Buffalo 14, N. Y. *Asst. Prof. Nancie B. Greenman, O.T.R., Director of Program in O.T.*
- Colorado State University, College of Home Economics, Fort Collins, Colo. *Assoc. Prof. Marjorie Ball, O.T.R., Director of O.T.*
- Columbia University, College of Physicians and Surgeons, 630 W. 168th St., New York 32, N. Y. *Assoc. Prof. Marie Louise Franciscus, O.T.R., Director of Courses in Occupational Therapy.*
- Eastern Michigan University, Ypsilanti, Michigan. *Assoc. Prof. Frances Herrick, O.T.R., Director of O.T.*
- Illinois, University of, College of Medicine, 1853 West Polk St., Chicago 12, Ill. *Assoc. Prof. Beatrice D. Wade, O.T.R., Head, O.T. Dept.*
- Indiana University, School of Medicine, 1200 West Michigan St., Indianapolis 7, Ind. *Assoc. Prof. Patricia Laurencelle, O.T.R., Director, Dept. of O.T.*
- Iowa, State University of, College of Liberal Arts and College of Medicine, Iowa City, Iowa. *Asst. Prof. Elizabeth Collins, O.T.R., Director of O.T.*
- Kansas, University of, Lawrence, Kansas. *Asst. Prof. Leland D. Miller, O.T.R., Director of O.T.*
- Medical Evangelists, College of, School of Medicine, Loma Linda, Calif. *Edwinna Marshall, O.T.R., Educational Dir., Curriculum in O.T.*
- Milwaukee-Downer College, 2512 E. Hartford Ave., Milwaukee 11, Wis. *Prof. Henrietta McNary, O.T.R., Director, Dept. of O.T.*
- Minnesota, University of, School of Medical Sciences, Minneapolis 14, Minn. *Asst. Prof. Borghild Hansen, O.T.R., Director, Course in O.T.*
- Mount Mary College, Milwaukee 10, Wis. *Sister Mary Arthur, O.T.R., Director of O.T.*
- New Hampshire, University of, College of Liberal Arts, Durham, N. H. *Asst. Prof. Anne Henderson, O.T.R., Supervisor of O.T. Curriculum.*
- New York University, School of Education, Washington Square, New York 3, N. Y. *Assoc. Prof. Frieda Behlen, O.T.R. Advisor, O.T. Curriculum.*
- North Dakota, University of, Grand Forks, N. D. *Asst. Prof. Amy Lind, O.T.R., Director of O.T. Dept.*
- Ohio State University, College of Education, Health Center, 410 W. 10th Ave., Columbus 10, Ohio. *Assoc. Prof. Barbara Locher, O.T.R., Chairman, Dept. of O.T.*
- Pennsylvania, University of, School of Allied Medical Professions, 3901 Pine St., Philadelphia 4, Pa. *Prof. Helen S. Willard, O.T.R., Director, Phil. School of O.T.*
- Puerto Rico, University of, School of Medicine, School of Physical and Occupational Therapy, Candelaria Esq. Mandry—Stop 22, Santurce, Puerto Rico. *Mr. Esteban Lopez-Fernandez, O.T.R., Curriculum Director of O.T.*
- Puget Sound, University of, Tacoma 6, Wash. *Asst. Prof. Elizabeth R. Waggoner, O.T.R., Director of O.T.*
- Richmond Professional Institute, College of William and Mary, Richmond 20, Va. *Miss H. Elizabeth Messick, O.T.R., Director, School of O.T.*
- Saint Catherine, College of, St. Paul 1, Minn. *Sister Miriam Joseph, O.T.R., Director of O.T.*
- San Jose State College, San Jose 14, Calif. *Prof. Mary D. Booth, O.T.R., Head, Department of O.T.*
- Southern California, University of, College of Letters, Arts and Sciences, Box 274, Los Angeles 7, Calif. *Assoc. Prof. Harriet Zlatohlavak, O.T.R., Head, Dept. of O.T.*
- Texas Woman's University, Denton, Texas. *Assoc. Prof. Rena Worthington, O.T.R., Director, School of O.T.*
- Tufts University, Boston School of Occupational Therapy, College of Special Studies, 7 Harcourt St., Boston 16, Mass. *Asst. Prof. Veronica Dobranske, O.T.R., Chairman, Dept. of O.T.*
- Washington University, School of Medicine, 4567 Scott Ave., St. Louis 10, Mo. *Asst. Prof. Martha Matthews, O.T.R., Director, Dept. O.T.*
- Wayne State University, College of Liberal Arts, Detroit 1, Michigan. *Assoc. Prof. Barbara Jewett, O.T.R., Chairman, Dept. of O.T., Rehabilitation Institute, 261 Brady St.*
- Western Michigan University, Kalamazoo 45, Michigan. *Assoc. Prof. Rosalia A. Kiss, O.T.R., Head, O.T. Dept.*
- Wisconsin, University of, School of Medicine, 1300 University Ave., Madison 6, Wis. *Asst. Prof. Caroline G. Thompson, O.T.R., Director of O.T.*
- Awaiting accreditation:*
- Florida, University of, College of Health Related Services, J. Hillis Miller Health Center, Gainesville, Florida. *Assoc. Prof. Alice C. Jantzen, O.T.R., Chairman, Curriculum in O.T.*
- Washington, University of, School of Medicine, Department of Physical Medicine and Rehabilitation, CC-814 University Hospital, Seattle 5, Washington. *Miss Shirley Bowring, O.T.R., Head, Division of O.T.*



SETS THE STAGE FOR MORE ADVENTURE IN ART

One of the amazing things about the Sta-Flo Prang Color Mixing Method is that it appeals to therapists in all levels of teaching and training. The expansive programs are simple enough to stimulate creativity in elementary groups yet challenging enough to inspire the advanced student and adults.

THE IDEAL MEDIUM . . . CREATIVE WISE . . . BUDGET-WISE

This happy color mixing method costs considerably less than many comparable materials, and assures new creative heights for your program.

Write today for free exciting Sta-Flo-Prang Ideas. Dept. OT-51

a

THE AMERICAN CRAYON COMPANY · SANDUSKY, OHIO · NEW YORK

ART

Method
g. The
in ele
student

r-WIS

y com
rogram

61

YORK